

Thuraya MarineStar



# Thuraya SatTrack

# **End User manual for Standard profile** V2.0

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# 1. Introducing Thuraya SatTrack

Thuraya SatTrack is a software-based tracking system designed for Thuraya MarineStar. Thuraya SatTrack provides secure, private and accurate vessel tracking to support operations, voyage planning benefiting vessel owners and operators.

You, as a Thuraya Customer, can request Thuraya to provision a Thuraya SatTrack package for the Marinestar terminals used by your Company.

If this is the first time you are requesting a MSISDN setup for your company, you will receive a license key. This license key can be used to set up your account on the Thuraya SatTrack portal.

If you are an already existing user of the portal, you can login with your credentials.

Thuraya SatTrack software can be accessed at <a href="https://sattrack.thuraya.com">https://sattrack.thuraya.com</a>

The software will show you the latest reported location of all your vessels which are active, suspended or deactivated on a map. Thuraya SatTrack will also allow you to view trails for different durations, receive alerts when the vessel enters a certain area, download tracking history for vessels, view areas assigned to the vessel, view the weather information at the vessel location, view different types of maps and overlays and many other capabilities.

# 2. Setup

Thuraya SatTrack is automatically associated with one or more Thuraya SIMs at the time of purchase.

A software account will be set up for you and will provide you access to all your vessels.



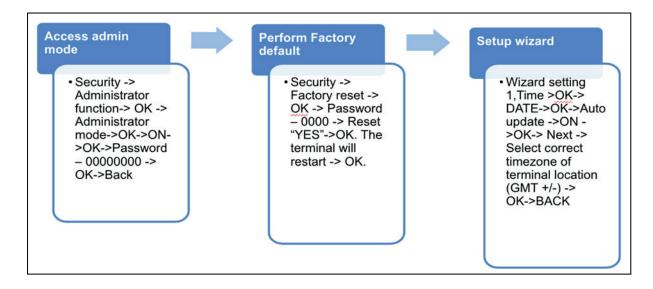




# 2.1 Pre-requisites for End User portal access

- 1. SatTrack portal access
- 2. Steady internet access
- 3. Laptop/PC with latest web-browser
- 4. Ensure no firewall blocking https://sattrack.thuraya.com/
- 5. License key to create the Enduser account to access the Sattrack Portal
- 6. Active sim-card subscribed to SatTrack portal
- 7. Sim-card tray to be used which is provided in the MarineStar packaging [Thuraya Nano-sim fixed on the tray]
- 8. Terminal powered by a reliable power supply with specs: 24V/1.8A or 12V/3.6A
- 9. Clear line of sight with signal strength showing min. 4 bars and GPS location acquisition until the entire setup is completed without any interruptions [Refer to Thuraya MarineStar user manual]
- 10. Test call and SMS prior as a recommendation

# 2.2 Initial Setup

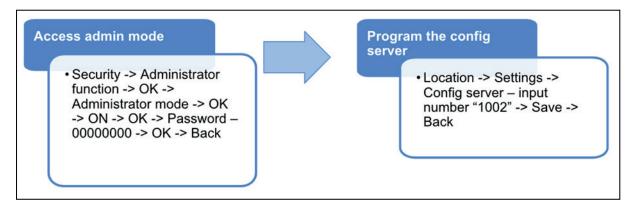




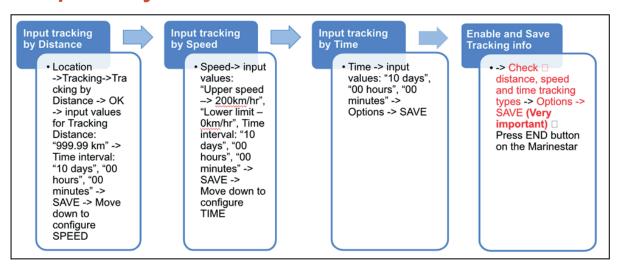




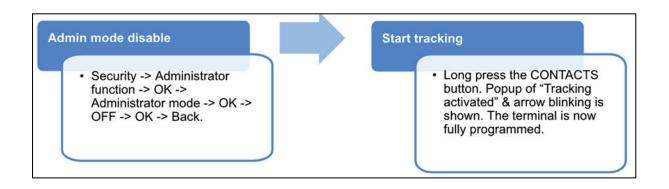
## 2.3 Link MarineStar to SatTrack



# 2.4 Program default tracking values for SatTrack compatibility



# 2.5 Start tracking

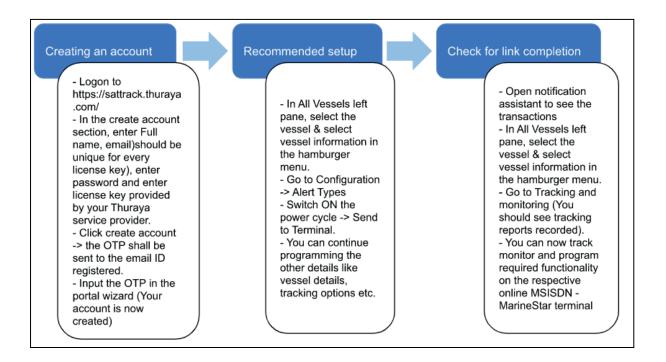


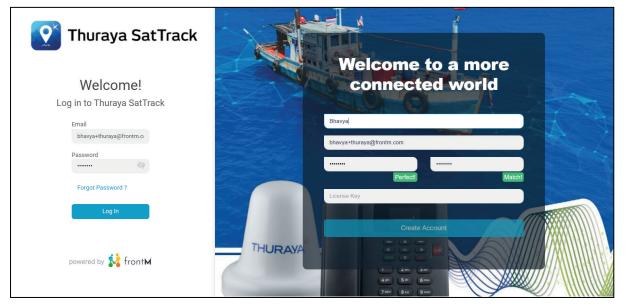






# 2.6 SatTrack initial setup





#### **Important notes:**

- 1. Ensure you follow all the steps mentioned as pre-requisites in Section 2.1 of the End user manual.
- 2. Ensure you do not change the default remote server authentication pin (0000000) on the terminal







- 3. GNSS co-ordinate format DD.ddddd is the only format supported on the portal. Ensure that the terminal is set up to send location in this format.
- 4. The portal is set up for English language.
- 5. The time shown in the assistant is the local PC time (the time zone on the end users PC).
- 6. The incoming, outgoing and missed calls are in the time zone that the terminal was in at the time of making the calls.
- 7. All other times are in GMT (indicated with a "GMT" tag in the column header)

## 2.7 Deactivation of SatTrack service

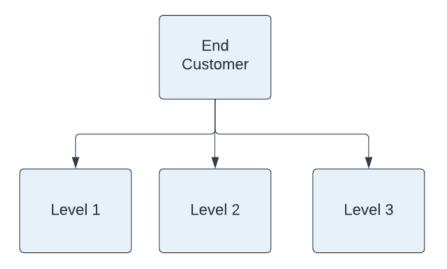
- 1. Request the admin password with your authorized service provider before deactivating the SatTrack service. Ensure the service and terminal is online while performing this activity.
- 2. Use the admin password to Factory reset the terminal.
- 3. Proceed with sattrack service deactivation with your service provider.
- 4. The deactivated MSISDN will be available on the portal for one(1) month from the date of deactivation.
- 5. The data of the deactivated MSISDN (transactional data and configuration) will be available upon request for one(1) year from the date of deactivation.







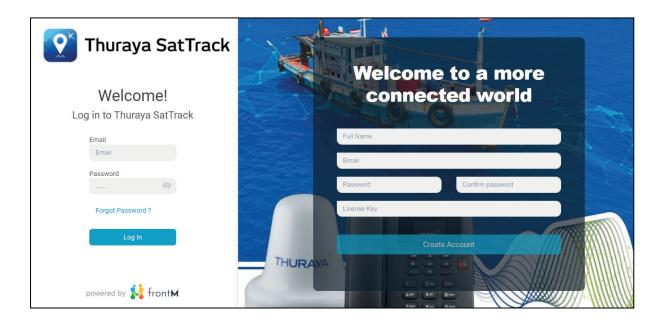
# 2.8 Understanding the user roles



# 2.9 Login and User Accounts

You will be able to create an account on the Thuraya SatTrack portal using the license key provided by Thuraya.

This will allow you to log in to the Thuraya SatTrack portal using the username (which will be an email ID) and the password chosen by you.









# 2.10 SMS usage

The Thuraya SatTrack software communicates with the terminal usingThuraya track and monitor plans.

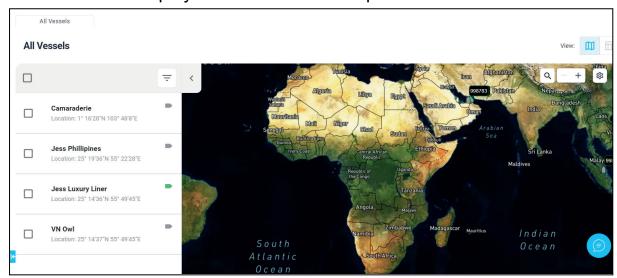
The following types of messages will normally be deducted from your Thuraya track and monitor plans:

 Responses sent by the terminal to the Thuraya SatTrack portal eg: Reporting of tracking information, alerts, success/fail acknowledgment from the terminal for the configuration from the portal, etc

# 3. Vessels - view and configuration

## 3.1 List of Vessels

The Vessel list shows the vessels that the end user logged in has access to. Vessels are displayed in two views – Map view and table.

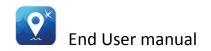


# 3.1.1 Vessel List – Map View

In the left pane of the Map View, when we click on the Vessel name, a pop up displays Vessel Name, Last known location & time, Course (in deg), Last reported SOS location & time, MSISDN, Status, IMEI, Firmware, Last event, Fleet, IMO, Registration number, Vessel Type details for each of the vessels.







#### **Vessel Icons Colors and Status**

Unresponsive

Good Vessel

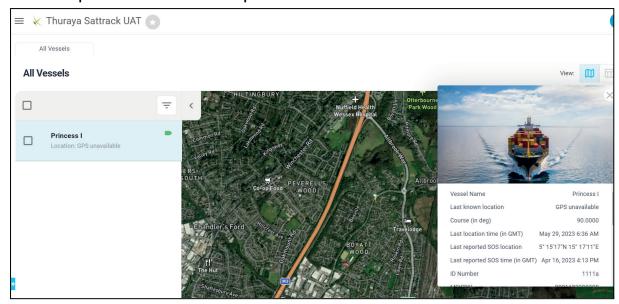
Bad Vessel

SOS

Deactivated

Suspended

- Unresponsive vessel within the last 24 hours/ 1 day; if tracking is not getting reported by the terminal on 100% of instances; then can be considered as a unresponsive vessel
- 2. Good Vessel within last 24 hours/ 1 day; if tracking is (i) on time and (ii) without any errors on 75%+ instances; then can be considered as a good vessel
- Bad Vessel within last 24 hours/ 1 day; if tracking is (i) not on time and (ii) having errors in 25%+ instances; then can be considered as a bad vessel
- 4. SOS: If vessel has sent SOS alert within last "4" hours; this vessel to qualify for SOS type
- 5. Deactivated All the deactivated msisdns will have this vessel icon.
- 6. Suspended All the suspended msisdns will have this vessel icon.



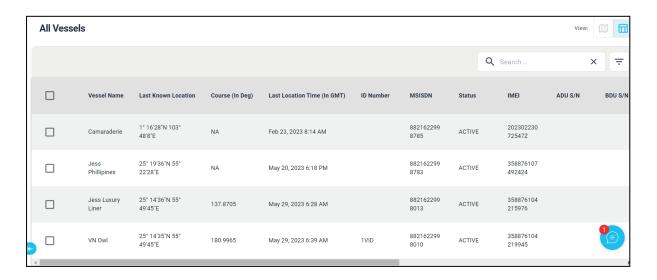






#### 3.1.2 Vessel List - Table

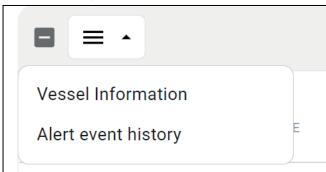
Click on the table view button ( ) to view vessel details in a table format - Vessel Name, Last known location & time, Course (in deg), ID Number, MSISDN, Status, IMEI, ADU S/N, BDU S/N, Firmware, Last event, Fleet, Region, IMO, Registration number, Vessel Type details for each of the vessels are displayed.



Additionally, Vessel name, Registration number, IMO, Vessel Type, ADU S/N, BDU S/N and ID Number can also be configured from the Thuraya SatTrack portal. Please refer <u>3.2.1 Vessel Details</u> section on how to configure these.

Selecting a checkbox next to any (one or more than one) vessel will

bring up the menu Icon at the top of the table which in turn will have Vessel Information & Alert Event History options which allows you to navigate to the Vessel information and Alert events history tabs respectively.





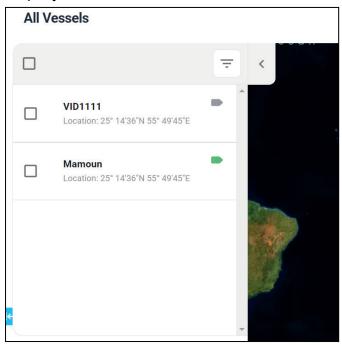




#### 3.1.3 Viewing vessels on the Map

To find a vessel on the map and zoom in on it, you can follow the below steps:

Step 1: Expand the list of All Vessels. This opens the left pane which displays all the vessels associated with the End User.



Step 2: Click on any of the vessels. The vessel location will be visible on the map.

Step 3: Click the vessel icon on the map, vessel details are displayed in a pop up on the map.

#### 3.1.4 Filter and search

We can also filter the Vessels by Vessel Name, Vessel Status, Vessel Type, Vessel MSISDN, Last Reported Event, Last Reported Event

Sub-Type, Vessel Behaviour, Fleet and Region using the filter button.



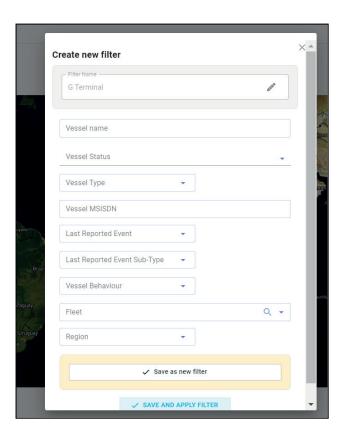






### Filtering of Vessels:

We can create our own filters by entering the Vessel Name, Vessel Status, Vessel Type, Vessel MSISDN, Last Reported Event, Last Reported Event Sub-Type, Vessel Behaviour, Fleet and Region details



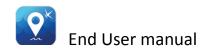
#### **Search Vessels:**

We can search vessels by entering the Vessel Name, Vessel Status, Vessel Type, Vessel MSISDN, Fleet and Region details.









## 3.2 Vessel Information

This includes the options below. These are described in more detail in the following sections.

Please refer to the <u>3.1 List of Vessels</u> on how to navigate to the Vessel Information tab.

#### Important note:

Any configuration changes sent from the Thuraya SatTrack portal will overwrite the existing settings on the terminal.

To get an overview of the configurations available to the end user, please refer to the 14. Permissions.

#### Tips:

- 1. For every configuration setting sent to the terminal from the portal, the acknowledgement received from the terminal will be shown in the assistant at the bottom right corner of the map.
- 2. The assistant can be opened and the notifications can be viewed by clicking on the at the bottom right corner of the map area.
- 3. Before sending any new configuration setting, make sure that the acknowledgement for the previous setting was received.



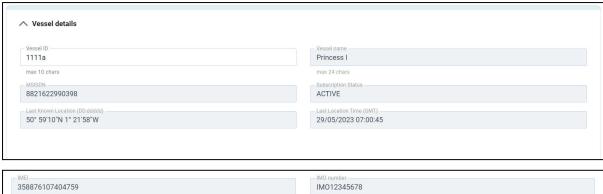




#### 3.2.1 Vessel Details

This function enables you to view and update Vessel image, Vessel name, Vessel ID, MSISDN, Subscription Status, Last Known Location & Time, IMEI, IMO, Registration Number, Fishing License, Length, Vessel Type, Fleet, Region, Contract ID, and profile.













## **Captain Details**

This section includes details about the captain such as Captain Name, Captain Mobile Number, Captain Email Address.



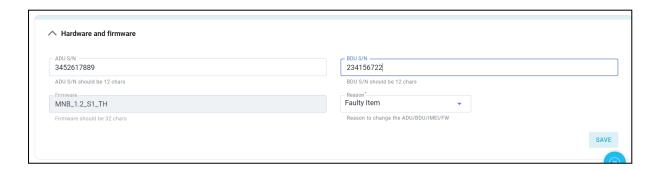
#### **Boat Owner Details**

This section includes details about the Boat Owner such as Boat Owner Name, Boat Owner Mobile Number, Boat Owner Email Address.



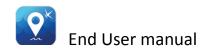
#### **Hardware and Firmware Details**

This section includes details about the Hardware such as ADU S/N, BDU S/N, Firmware and Reason (Reason to change the ADU/BDU/IMEI/FW).









#### 3.2.2 Tracking

Clicking the 'Tracking and Monitoring' tab opens the Tracking & Monitoring map view with trails visible on the map.

#### 3.2.2.1 Tracking Map & Table View

Tracking History will display the history of the points in time the vessel has been tracked and the locations of the vessel at that time. It will also display the type of tracking event received (polled, tracking by time, tracking by speed, tracking by distance), Alert events, GeoFence, SOS, Course(in deg) which is the difference between the location in the tracks.

Note: Weather information is sourced from World weather online. There might be some differences with weather forecast from local agencies

#### Vessel Icon colors and event types

Tracking

SOS

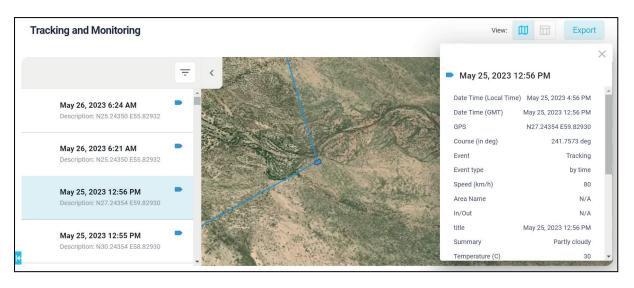
Power Cycle

Reset

Signal Strength

GPS Antenna

GPIO 1 & 2











The refresh button (the button on the top right of the table with a circular arrow icon) can be used in case you would like to manually check for any new messages that might have arrived from the terminal.

This tracking history can be exported to a csv format using the button. We can also filter the tracking history by duration, Event and Event type using the filter button.

# Exporting the tracking data into a csv file:

Step 1: Click on the "Export" button.

Step 2: The file will be downloaded to your computer. It will be available in the "Downloads" folder in your computer.

# Tip:

- 1. If you are opening the downloaded csv file in excel, ensure that you are setting the format of the "MSISDN" column to text. This will ensure that the MSISDN shows up correctly.
- 2. To display UTF-8 compliant CSV files when they contain non-English characters correctly, please follow below steps:
  - a. open the CSV file using Notepad.
  - b. Click "File > Save As".
  - c. In the dialog window that appears select "ANSI" from the "Encoding" field. Then click "Save".



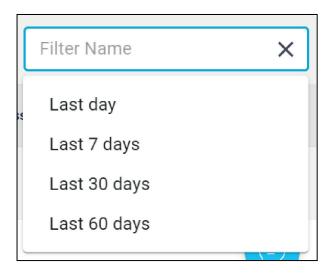




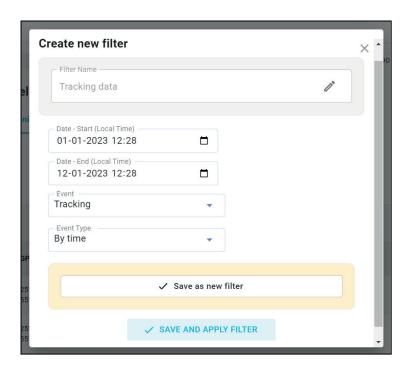
d. Open this new CSV file using Excel. Non-English characters will now appear correctly in the file.

#### Filtering of Tracking Data:

The Filter allows you to select the duration of the tracking trail that you want to display on the map/table for a vessel. Default filters available are Last Day, Last 7 Days, Last 30 Days, Last 60 Days.



We can also create our own filters by selecting the duration, Event, Event Type.









#### 3.2.3 Configuration

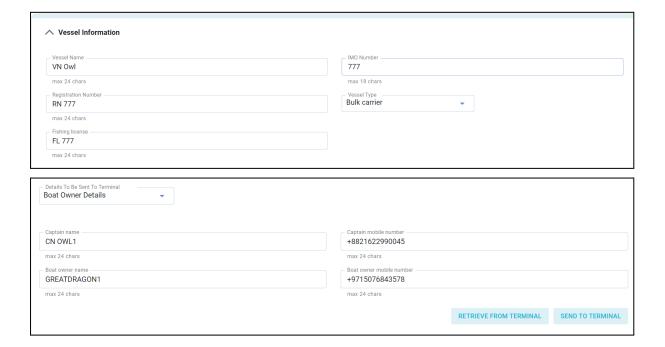
Important Note: As an End User, you will be able to view & update all the configurations except for captain password.

#### 3.2.3.1 Vessel Information

Important Note: As an End User, you will only be able to update the Vessel Information.

This function enables you to view & update Vessel name, IMO, Registration Number, Fishing License, Vessel Type, Details to be Sent to Terminal, Captain Name, Captain Mobile Number, Boat Owner Name, and Boat Owner Mobile Number.

Users can also retrieve vessel details from the terminal.



## **3.2.3.2 Tracking**

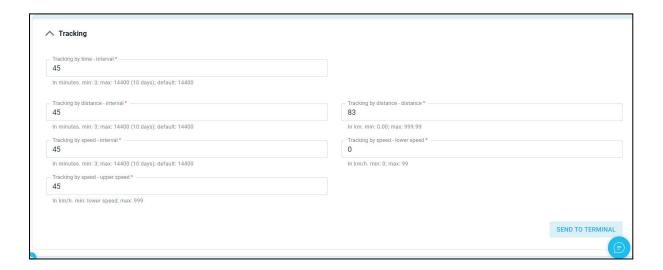
Important Note: As an End User, you will only be able to view/update the settings in the tracking section.







There are three types of tracking available – by time, distance, and speed. The **Tracking** section enables you to set up any combination of these tracking parameters.



#### Possible values:

Time interval	Allows you to change the tracking interval, which can be from 3 mins to 14400 min (10 days)
Distance	This tracks the vessel's progress over a certain distance – which can be from 0 – 999 km  This option has 2 parameters that can be configured:  1. Tracking by distance - interval  This defines the intervals at which the terminal will check the distance travelled.  2. Tracking by distance - distance  This defines the distance to be covered before sending out the next location tracking message.
Speed	This allows you to input an upper and lower speed limit.  1. Tracking by speed - interval     This defines the intervals at which the terminal will check the speed.  2. Lower speed limit can be between 0 and 99 km/h  3. Upper speed limit can be between the lower speed limit and 999 km/h  This option, once set, will trigger a notification from the terminal whenever the vessel speed falls below the lower limit or breaches the upper limit.







### 3.2.3.3 Alert Types

The terminal can be configured to send alerts notifying you of changes to the terminal environment, like the signal strength going from 0 to 1, the terminal being reset, Power Cycle, GPS Antenna connection, GPIO1 and GPIO2 changes.

The **Alert Type** section allows you to view the current configuration and also enable/disable the events for which the terminal should send alert events.

You can make changes and click on the "Send to terminal" button to send the changes to the terminal.

You can also click on "Retrieve from terminal" to retrieve the configuration from the terminal.

↑ Alert types		
■ Signal Strength		
GPS Antenna		
Power Cycle		
Reset		
<b>■</b> GPI01		
<b>◯</b> GPI02		
	RETRIEVE FROM TERMINAL	SEND TO TERMINAL







#### 3.2.3.4 SOS Settings

This allows you to to view the current configuration and also configure the SOS recipients and messages on the terminal.

You can make changes and click on the "Send to terminal" button to send the changes to the terminal.



#### 3.2.3.5 Fish Types

**Important Note:** As an End User, you will be able to view/update the fish types configured onto the terminal. You will also be able to retrieve the catch reports from the terminal.

The **Fish types** section allows you to view the current configuration and also configure the fish types your vessel can fish and report.

You can make changes and click on the "Send to terminal" button to send the changes to the terminal.







You can also click on "Retrieve from terminal" to retrieve the configuration from the terminal.



#### 3.2.3.6 Fishing Gear

**Important Note:** As an End User, you will be able to view/update the fishing gear configured onto the terminal. You will also be able to manually retrieve the fishing gear information from the terminal.

The **Fishing gear** tab can be used to view the current configuration and also configure the fishing gear your vessel carries.

You can make changes and click on the "Send to terminal" button to send the changes to the terminal.

You can also click on "Retrieve from terminal" to retrieve the configuration from the terminal.









#### 3.2.3.7 GPIO Control & Function

Important Note: As a Thuraya End User, you will be able to view/update the GPIO settings.

The **GPIO Control & Function** section is for third-party devices which may be connected to your Thuraya terminal.

The exact function of the switches will depend on how your system is set up – speak to your Thuraya Service Partner to learn more

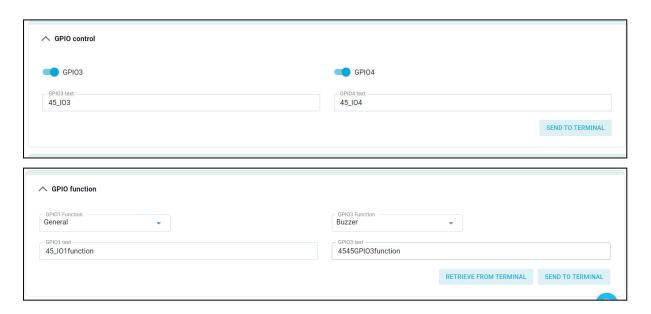
GPIO3 and GPIO4 can be remotely switched from the Thuraya SatTrack software – changing this will affect the relay switch.

By default, GPIO 1 switch is an SOS alarm and GPIO3 sets off a buzzer on the terminal. These defaults can be switched to another function using the dropdown

By default, the GPIO4 switch performs no action – unless your Thuraya End User has configured it to connect to something.

You can make changes and click on the "Send to terminal" button to send the changes to the terminal.

You can also click on "Retrieve from terminal" to retrieve the configuration from the terminal.









#### 3.2.3.8 Captain Password

Important Note: As an End User, you will be able to only view the Captain Password. You will not be able to make any modifications to the Captain Password.

#### 3.2.3.9 Request for Admin Password Change

End User can only request to change the admin password by entering the reason for changing the admin passwords. The request can be Approved/ Rejected by the users Customer profile users/Reseller/SP/Customer Care.



#### 3.2.3.9 Report Server Settings

Important Note: As an End User, you will be able to view/update the Report Server Settings.

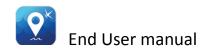
The **Reporting Server settings** tab can be used to view the current configuration and also configure the reporting server and recipients for your terminal.

You can make changes and click on the "Send to terminal" button to send the changes to the terminal.

Recipient 1	Recipient 2
1002	bhavya@gmail.com
email (max 40 chars) or phone (max 32 digits)	email (max 40 chars) or phone (max 32 digits)
Recipient 3	Recipient 4
rhea_d@yahoo.com	6543456787
email (max 40 chars) or phone (max 32 digits)	email (max 40 chars) or phone (max 32 digits)
Recipient 5	Server
9876565432	1002
email (max 40 chars) or phone (max 32 digits)	max 32 chars







#### 3.2.4 Fish Catch Reports

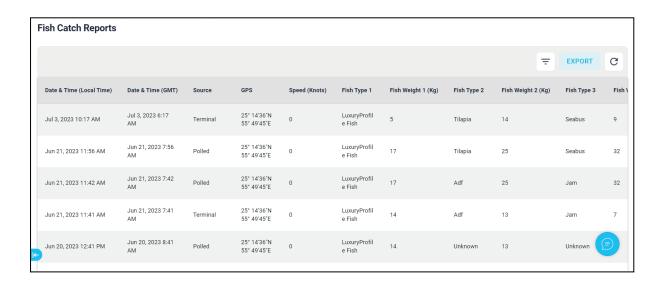
**Important Note:** As an End User, you will only be able to view the catch reports sent from the terminal. You will also be able to manually retrieve the catch reports from the terminal.

The **Catch Reports** tab shows the catch reports submitted by the terminal. It displays the time the report was submitted, the fish type and the catch weight if entered by the terminal (normally entered in kilograms)

There are two kinds of fish catch reports.

- 1. Reports retrieved from the terminal by the end user: These reports show up with the Source as "polled"
- 2. Reports sent from the terminal (as a push from the terminal)
  These reports show up with the Source as "terminal"

Reports automatically refresh in this table when a fish catch report is received from the terminal.



The refresh button (the button on the top right of the table with a circular arrow icon) can be used in case you would like to manually check for any new messages that might have arrived from the terminal.







Clicking on the Export button will export the fish catch reports and download it onto the user's PC.

#### Tip:

- 1. If you are opening the downloaded csv file in excel, ensure that you are setting the format of the "MSISDN" column to text. This will ensure that the MSISDN shows up correctly.
- 2. To display UTF-8 compliant CSV files when they contain non-English characters correctly, please follow below steps:
  - a. open the CSV file using Notepad.
  - b. Click "File > Save As".
  - c. In the dialog window that appears select "ANSI" from the "Encoding" field. Then click "Save".
  - d. Open this new CSV file using Excel. Non-English characters will now appear correctly in the file.
  - Clicking on the Filter button next to the "Export" button allows the user to filter the Fish catch report data using parameters such as date and time.

## 3.2.5 Messages

**Important Note:** As an End User, you will be able to see the history of messages sent from the portal to the terminal. You will also be able to send any messages to the terminal.

Thuraya SatTrack has a message interface to send messages to and receive messages from Thuraya terminals.

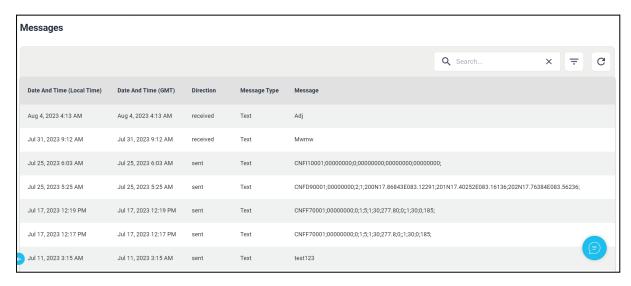
Messages can be used to send the crew weather, emergency, news and information updates.





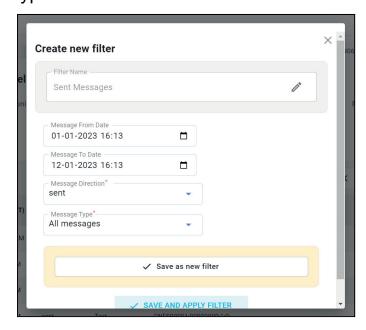


The **Messages** tab shows a history of all the messages sent from the portal to the terminal.



The refresh button (the button on the top right of the table with a circular arrow icon) can be used in case you would like to manually check for any new messages that might have arrived from the terminal.

Messages can be filtered by duration, Message Direction and Message type.









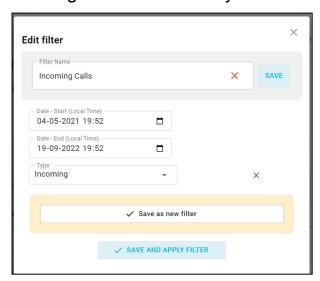
#### 3.2.6 Call Logs

Important Note: As an End User, you will be able to see the data. You will also be able to retrieve the data from the terminal.

Click on the 'Calls Logs' tab to view the call history of the MarineStar terminal on board a particular vessel. Outgoing calls made from the terminal, Incoming calls received by the terminal and Calls missed by the terminal are displayed here.

Click on the icon and select Retrieve incoming calls/ Retrieve missed calls/ Retrieve outgoing calls to retrieve the calls from the terminal.

Call Logs can be filtered by duration and Call type.



# 3.2.7 Call Manager

# 3.2.7.1 Crew calling

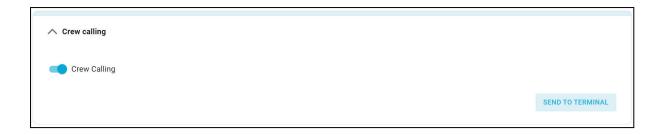
Important Note: As an End User, you will be able to view the Crew calling setting (whether it is enabled or disabled). You will also be able to modify the settings on the portal/terminal.







The toggle button under Crew Calling allows enabling or disabling the crew from making calls.



You can make changes and click on the "Send to terminal" button to send the changes to the terminal.

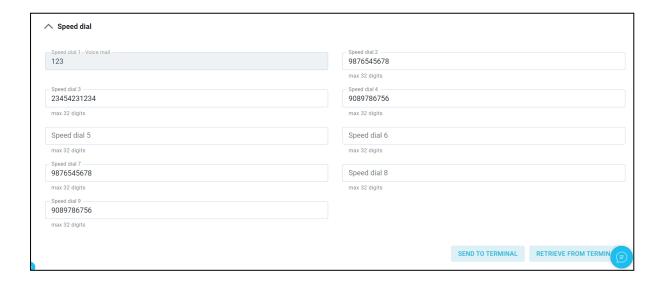
#### **3.2.7.2 Speed dial**

Important Note: As an End User, you will be able view/update the speed dial numbers.

- 1. The first speed dial number (1) is always configured to the voice message (123). Hence only speed dials 2 9 are configurable.
- 2. Speed dial numbers are limited to a maximum of 32 digits only (including the leading +)

# Tip:

PSTN numbers can be entered with a prefix of 00 before the country code or a prefix of + before the country code.









You can make changes and click on the "Send to terminal" button to send the changes to the terminal.

#### **3.2.7.3 Whitelist**

Important Note: As a Thuraya End User, you will be able to view/update the Whitelist settings (whether they are enabled or disabled) and Whitelist numbers.

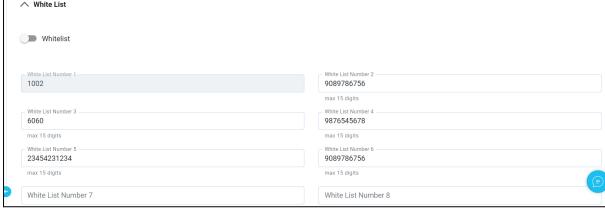
You can view the current status of whitelist setting and currently whitelisted numbers as well:

1. enable/disable the whitelist setting

numbers to the terminal for configuration.

2. Configure/edit the whitelisted numbers. Clicking on "Send to terminal" will send this setting as well as the

∧ White List Whitelist 9089786756



- 1. A maximum of 25 numbers can be whitelisted.
- 2. The first whitelisted number is 1002, hence users can only configure 24 numbers on the portal.
- 3. Whitelist numbers added on the terminal directly cannot be retrieved by the portal. They will be overwritten by the numbers added on the portal.
- 4. Whitelisting a number will allow the terminal to only call (outgoing calls) and receive calls (incoming calls) from that number.







The **Whitelist** section allows you to allow only a restricted list of numbers to call the terminal or for the terminal to call [whitelist]. In other words, incoming calls to the terminal and outgoing calls from the terminal are only allowed to this/these number(s).

#### 3.2.7.4 Blacklist

Important Note: As a Thuraya End User, you will be able to view/update the Blacklist settings (whether they are enabled or disabled) & Blacklist numbers.

You can view the current status of blacklist setting and currently blacklisted numbers as well:

- 1. enable/disable the blacklist setting
- 2. Configure/edit the blacklisted numbers. Clicking on "Send to terminal" will send this setting as well as the numbers to the terminal for configuration.



- 1. Do not add 1002 as a blacklist number as this will prevent the terminal from sending any messages to the portal.
- 2. A maximum of 25 numbers can be blacklisted.
- 3. Blacklist numbers added on the terminal directly cannot be retrieved by the portal. They will be overwritten by the numbers added on the portal.







4. Blacklisting a number will not allow the terminal to either receive (incoming calls) or call (outgoing calls) to that number.

The **Blacklist tab** allows you to block certain numbers from calling the terminal or the terminal calling the number [blacklist]. In other words, incoming calls to the terminal and outgoing calls from the terminal are not allowed to this/these number(s).

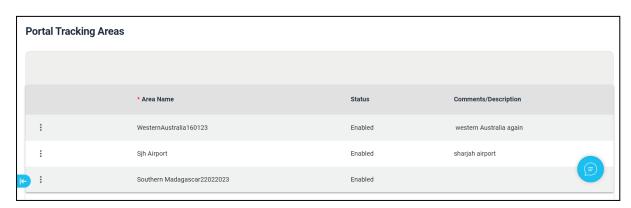
#### 3.2.8 Portal Tracking Areas

Important Note: As an End User, you will be able to view/add the Portal Tracking Areas.

Areas can be defined on the map for tracking purposes. Thuraya SatTrack portal allows a user to add upto 100 tracking areas on the portal. These are not configured onto the terminal but used on the portal only for tracking.

Tracking by portal areas is dependent on the location reported by the terminal. Based on the latest location reported by the terminal, the SatTrack portal will flag the tracking alert as "portal area" if it is within one of the configured and enabled portal tracking areas.

These alerts will be visible in the <u>Tracking and Monitoring table and map view</u> with event type as "portal area", the name of the area that the vessel has entered or exited and the current status ("in" the area or "out" of the area).



You can add new portal tracking areas by clicking on "New area" button and then choosing an area that has been previously created by you (Please refer to <u>Areas</u> on steps to create a new area)



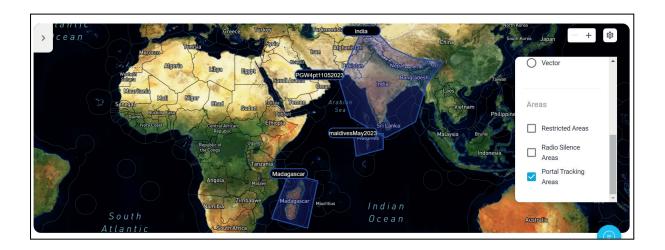




The display shows the Portal Tracking areas saved on the portal. This tab shows all the areas set up as portal tracking areas.

## Viewing Portal Tracking areas on map:

- Step 1: Go to Tracking and Monitoring Map view.
- Step 2: Click on Settings icon 🥸
- Step 3: Select Portal Tracking Areas under Areas. The areas will appear on the map.



#### 3.2.9 Radio Silence Areas

Important Note: As an End User, you will only be able to view/add the Radio silence Areas.

Radio Silence	Zones			
	Number	* Area Name	Status	Comments/Description
:	1	RS1	Disabled	
:	2	RS2	Disabled	
:	3	WesternAustralia160123	Enabled	
:	4	india	Disabled	
	5	Madagascar	Enabled	
:	6	3ptAcademicCity170123	Disabled	







Areas can be defined on the map for tracking purposes. For example, You can configure the areas to stop transmissions from the terminal when it is entering a radio silence zone. Areas [geofences] saved under Radio Silence turn off the transmission from the terminal when the vessel enters this area.

The display shows the Radio Silence areas saved on the MarineStar terminal. The portal allows up to 10 Radio silence areas with 10 geo-coordinates each to be saved on the terminal. Areas saved to the terminal are displayed on the radio silence tab. This tab shows all the areas that are set up as Radio Silence zones on the terminal.

When the terminal enters a Radio silence zone that is enabled, a radio silence zone report (RS) is sent to the portal. These alerts will be visible in the <u>Tracking and Monitoring table and map view</u> with event type as "Radio silence", the name of the area that the vessel has entered or exited and the current status ("in" the area or "out" of the area)

You can add/edit radio silence areas on the terminal by clicking on the contextual menu against the slot that you want to configure. Choose the "Edit" option and then select the area you want to configure from areas that have been previously created by you (Please refer to <u>Areas</u> on steps to create a new area).

Clicking on save will send the area configuration to the terminal.

Please refer to the Thuraya MarineStar user manual for more information.

## **Viewing Radio Silence areas on map:**

Step 1: Go to Tracking and Monitoring Map view.

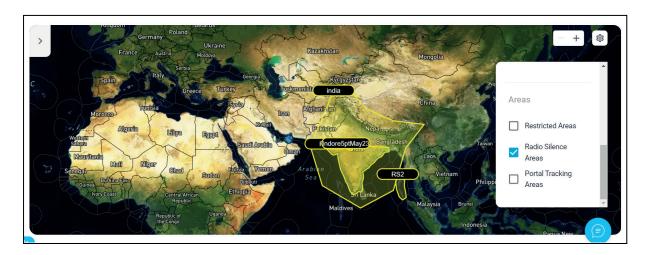
Step 2: Click on Settings icon <sup>®</sup>







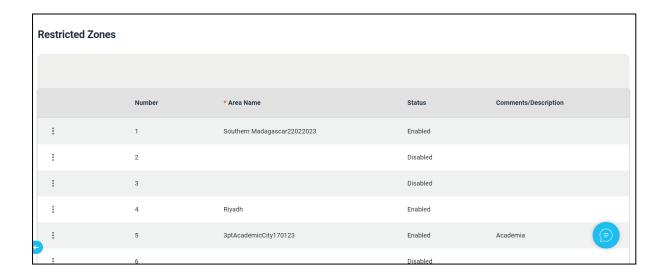
Step 3: Select Radio Silence Areas under Areas. The areas will appear on the map.



#### 3.2.10 Restricted Zones

Important Note: As an End User, you will be able to view/add the Restricted Zone Areas.

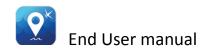
Areas can be defined on the map for tracking purposes. Areas [geofences] saved under Restricted Zone will sound an alarm on the terminal when the vessel enters them.



The display shows the Restricted Zone areas saved on the MarineStar terminal. The portal allows up to 10 Restricted zone areas with 10 geo-coordinates each to be saved on the terminal. Areas saved to the







terminal are displayed on the Restricted zones tab. This tab shows all the areas that are set up as restricted zones on the terminal.

When the terminal enters a Restricted zone that is enabled, a restricted zone report (RZ) is sent to the portal. These alerts will be visible in the <u>Tracking and Monitoring table and map view</u> with event type as "Restricted zone", the name of the area that the vessel has entered or exited and the current status ("in" the area or "out" of the area)

You can add/edit restricted zone areas on the terminal by clicking on the contextual menu against the slot that you want to configure. Choose the "Edit" option and then select the area you want to configure from areas that have been previously created by you (Please refer to <u>Areas</u> on steps to create a new area).

Please refer to the Thuraya MarineStar user manual for more information.

#### **Viewing Restricted Zone areas on map:**

Step 1: Go to Tracking and Monitoring Map view.

Step 2: Click on Settings icon

Step 3: Select Restricted Zone Areas under Areas. The areas will

appear on the map.





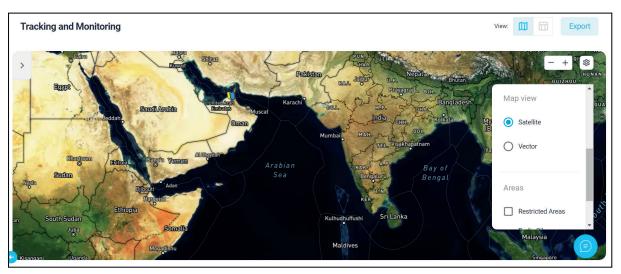




# 4. Map display options

There are two types of map options available - Satellite and Basic vector

Click on the Settings icon at the top right corner of the map. Select the option "Satellite" for Satellite map and "Vector" for Basic vector map under Map view. The displayed map will be updated.



### [Satellite map]



[Vector map]







# 5. Overlays

#### **5.1 FAO**

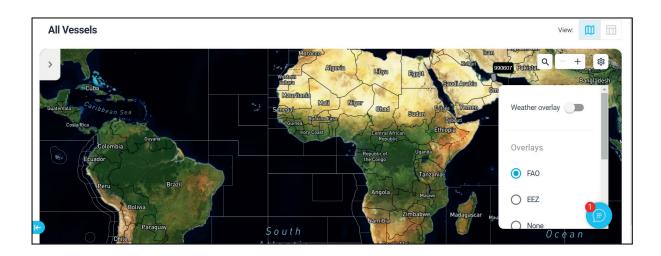
The FAO zones (Food and Agriculture organization defined zones for fisheries) are available as an overlay on the map.

The FAO Zones are displayed as thin grey lines on the map.

Enabling/Disabling of the FAO Zones overlay:

Step 1: Click on the Settings icon displayed on the map.

Step 2: Select the "FAO" radio button. It will turn ON the FAO Zones.



## **5.2 EEZ**

An EEZ (exclusive economic zone) is an area of the ocean, generally extending 200 nautical miles (230 miles) beyond a nation's territorial sea, within which a coastal nation has jurisdiction over both living and nonliving resources.

Enabling/Disabling of the EEZ:

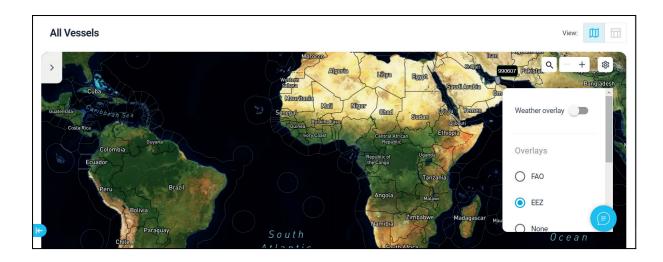
Step 1: Click on the Settings icon displayed on the map.







Step 2: Select the "EEZ" radio button. It will turn ON the EEZ overlay.



# **5.3 Weather Overlay**

Enabling/Disabling of the Weather overlay:

Step 1: Click on the Settings icon displayed on the map.

Step 2: Switch ON the Weather Overlay. It will turn ON the Weather overlay.



# **5.4 Custom Overlay**

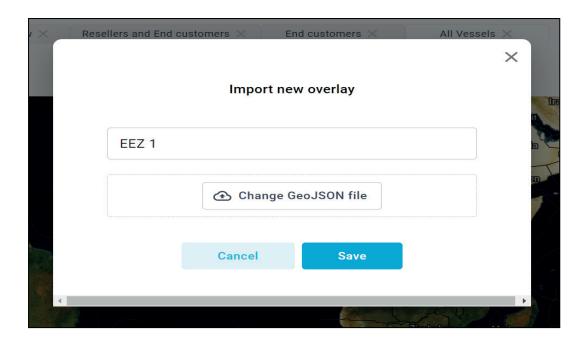
Important Note: As an End User, you will be able to import and view the imported Overlays on the All vessels screen.







Custom overlays can be created by the user with the help geojson file.



# 6. My Information

My Information displays the Role, License Key, Name Email ID details of the logged in user.









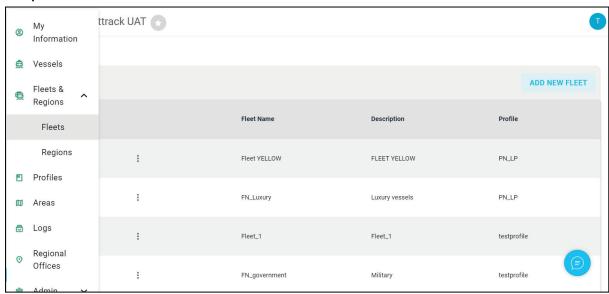
# 7. Fleets & Regions

### 7.1 Fleets

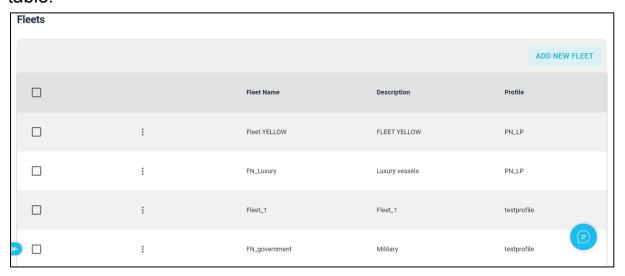
User can create fleets of their vessels for ease of operations.

#### 7.1.1 Fleets List

- Step 1: Click on the menu button at the top left corner.
- Step 2: Select the Fleets & Regions option from the drop-down menu.
- Step 3: Select Fleets.



All the fleets that are created by you will be visible under the Fleets table.

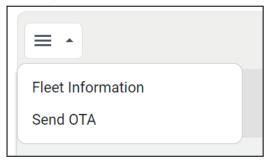




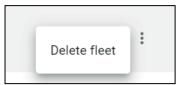




The checkbox next to each fleet will open the fleet menu which will allow you to perform functions such as Fleet information and Send OTA.



The button next to each fleet will allow you to delete the fleets.



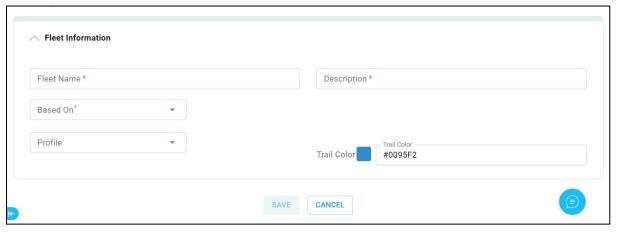
#### 7.1.2 Adding a new fleet

Clicking on the "Add New Fleet" button at the top of the Fleet list will allow you to create a new fleet.

A new tab is opened to fill in the details and add fleet.

You can create fleets based on:

- 1. Vessels
- 2. Vessel Type
- 3. Regions



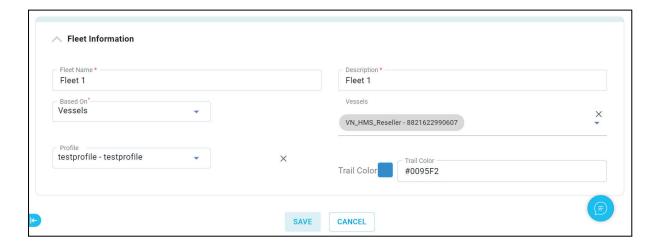






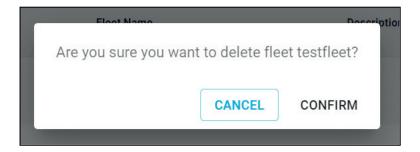
#### 7.1.3 Edit a fleet

Select the fleet (by selecting the checkbox next to it in the fleet list), and the menu with "Fleet Information & "Send OTA" options will be enabled. Select Fleet Information to edit the fleet.



#### 7.1.4 Delete a fleet

Select the Delete fleet option from the menu. Click on the confirm button to delete the fleet.









#### **7.1.5 Send OTA**

Select the fleet (by selecting the checkbox next to it in the fleet list), and the menu with "Fleet Information & "Send OTA" options will be enabled. Select Send OTA option to send the OTA commands for the vessels in the fleet.



We can update Tracking, Alert types, SOS settings, Fish Types, Fishing gear, GPIO control & function, Crew Calling, Speed Dial, Whitelist, Blacklist, Radio Silence zones and Restricted zones of multiple vessels at a time using the send OTA feature. Each section will have a "Send to terminal" button.

## 7.2 Regions

Users can create regions of their vessels for ease of operations.

## 7.2.1 Regions List

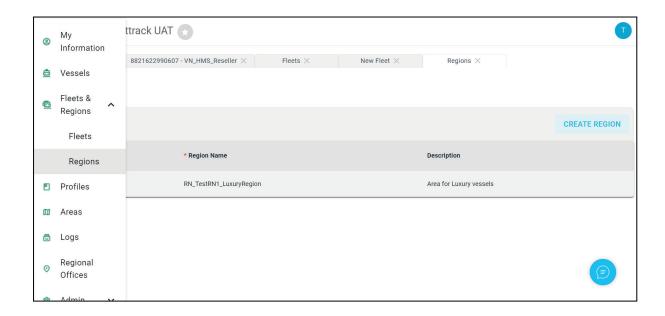
- Step 1: Click on the menu button at the top left corner.
- Step 2: Select the Fleets & Regions option from the drop-down menu.



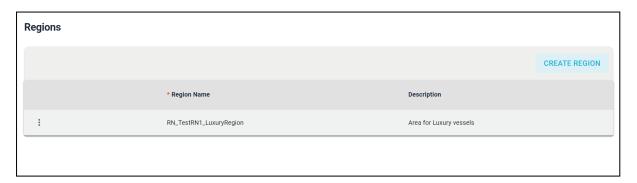




### Step 3: Select Regions.



All the regions that are created by you will be visible under the regions table.



The button next to each region will allow you to edit/delete the fleets.

## 7.2.2 Adding a new region

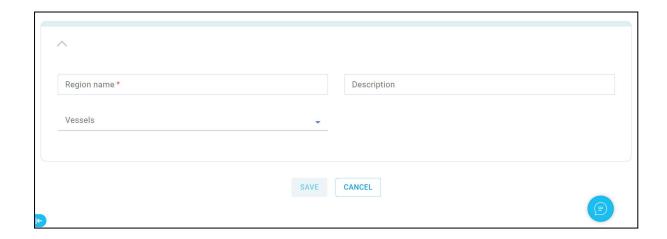
Clicking on the "Create Region" button at the top of the Region list will allow you to create a new region.







A new tab is opened to fill in the details and add region.



## 7.2.3 Edit a region

Click on button next to the region & select "Edit Region" option.



Update the region details and save.









#### 7.2.4 Delete a region

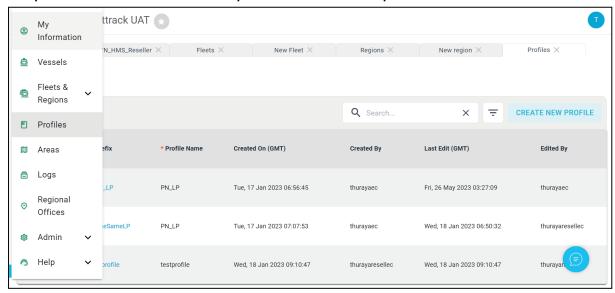
Select the Delete region option from the imenu delete the region.

# 8. Profiles

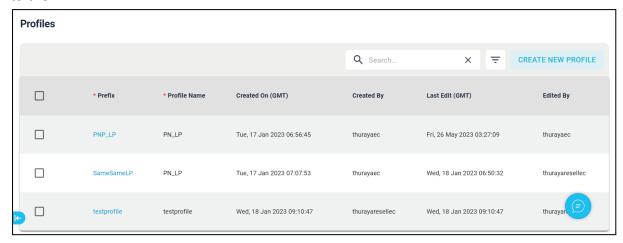
User can create groups of fleets of their vessels for ease of operations.

#### 8.1 Profiles List

- Step 1: Click on the menu button at the top left corner.
- Step 2: Select the Profiles option from the drop-down menu.



All the profiles that are created by you will be visible under the profiles table.



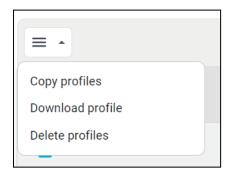
Clicking on the profile name will allow you to view the profiles.





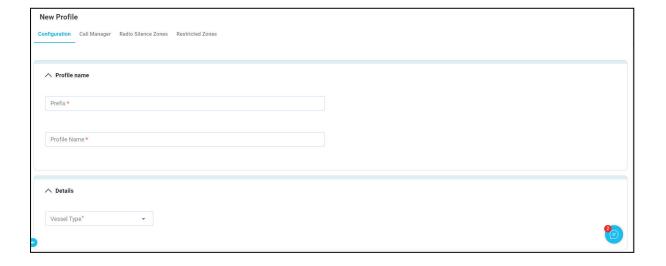


The checkbox next to each profile will enable a menu at the top of the table that will allow the user to copy profiles, download profiles and delete profiles.



#### 8.2 Create new Profile

Clicking on the "Create New Profile" button at the top of the profile list will allow you to create a new profile.



A new tab is opened to fill in the details which includes Profile prefix, Profile name, vessel type, Tracking, Alert types, SOS settings, Fish Types, Fishing gear, GPIO control & function, Crew Calling, Speed Dial, Whitelist, Blacklist, Radio Silence zones and Restricted zones and then profile is added.







User can only save the profile or save and apply the profile.

Save will only save the profile without sending out configuration commands to the selected vessels.

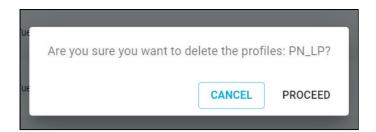
Save and Apply will save the profile and also send configuration commands to configure the vessels selected with the profile configurations.

#### 8.2 Edit Profile

Clicking on the profile name in the profile list will allow you to view/edit the profiles.

#### 8.3 Delete Profile

Select the checkbox next to each profile and select delete profiles from the menu. Click on the proceed button to delete the profile.



## 8.4 Copy Profile

Select the checkbox next to each profile and select copy profiles from the menu. Profile tab opens up with the same data as the profile selected. User can save it as is or update any data and save the profile.

#### 8.5 Download Profile

Select the checkbox next to each profile and select Download profiles will download the profiles in csv file. The file will be downloaded to your computer. It will be available in the "Downloads" folder in your computer.



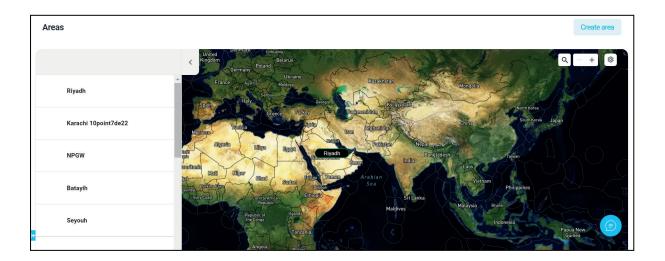




# 9. Areas

Important Note: As an End User, you will be able to view/add/update the areas.

Areas is a menu item in the top-left corner menu. Areas will have a map view. In the map view, areas are listed in the left pane and their respective locations are marked on the map when selected.



# 9.1 Creating an Area file for import

The file should be created and saved in csv format – the Area name can be entered while importing the file.

You can create and edit these in a spreadsheet program Microsoft Excel, or in a plain-text tool like notepad. The file should have two columns and up to 100 rows.

The first row should be the header (latitude, longitude).







Latitude in a decimal degrees format with the following prefix:	Longitude in a decimal degrees format with the following prefix:	
(i) - to denote S	(i) - to denote W	
(ii) no prefix for N	(ii) no prefix for E	
e.g.	eg.	
37.47775	023.88643	
09.56486	126.88161	
-66.43152	-033.98412	
-05.65735	-003.78432	

Each row represents a corner of the boundary of the area to be defined on the terminal. These should be sequentially ordered, so Point 00 is joined to point 01, point 01 to point 02 etc.

The last geo point is joined to the first geo point to draw an enclosed shape.

## Important notes:

1. If you open the file in a spreadsheet software like excel, the leading zeroes will be removed (i.e. it will become 1.54675,23.52134 instead of 01.54675,023.52134), which will cause the file to error when uploading onto the portal.

You can fix this by either changing the cell to a "text" format in the spreadsheet or opening the file in a plain text tool to ensure the leading zeroes are not removed.

- 2. Only areas with less than or equal to 10 co-ordinates can be assigned to "Radio Silence" and "Restricted Zones".
- 3. Areas with more than 10 co-ordinates can be assigned to "Portal tracking areas" only.







- 4. UTF-8 compliant CSV files when they contain non-English characters. To display correctly, please follow below steps:
  - a. open the CSV file using Notepad.
  - b. Click "File > Save As".
- c. In the dialog window that appears select "ANSI" from the "Encoding" field. Then click "Save".
- d. Open this new CSV file using Excel. Non-English characters will now appear correctly in the file.

#### Tips:

- 1. If the points are not sequentially ordered, it will error out and the area will not be loaded onto the portal.
- 2. The latitude should always be 2 digits (02, 25, etc) and the longitude should always be 3 digits (005, 012, 123, etc) before the decimal point.
- 3. If the precision for Latitude/Longitude is less than or more than 5 digits after decimal, it will error out and the area will not be loaded onto the portal.

## Sample file:

latitude,longitude 52.17176,-001.93881 50.60889,-002.01022 50.85228,001.18129 52.31639,001.24721







## 9.2 Creating a new area

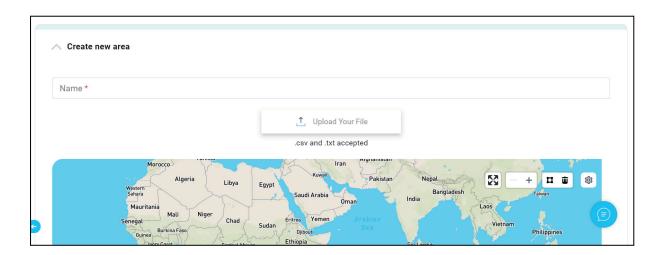
A new area can be created by

- 1. importing a csv file and storing it on the portal.
- 2. drawing an area on the map and storing it on the portal This area can then be assigned to the respective slots.

# 9.3 To import a csv file to create a tracking area

Step 1: Click on the "Create Area" button present in the top right.

Step 2: Fill in the name (as you would want it to appear in the list) and upload the file using the "Upload Your file" button.



Step 3: Click on "Save" to upload the file and save it on the portal.







# 9.4 To draw an area on the map

- Step 1: Click on the "Create Area" button on the right top
- Step 2: Fill in the name (as you would want it to appear in the list)
- Step 3: Click on "Polygon tool" and draw area on the map



Step 4: Click on "Save" to upload the file and save it on the portal.



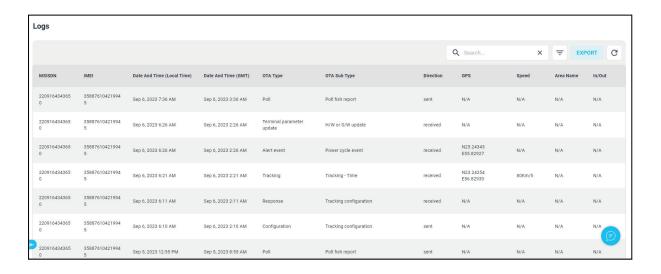




# 10.Logs

Logs option is available under the Main menu. All the incoming and outgoing messages are being shown under 'Logs'.

The information under "Logs" include MSISDN, IMEI, Date and Time, OTA Type, OTA SubType, Direction, GPS, Speed, Area Name, In/Out and Message. If values are not available 'N/A' is displayed.



Logs can be exported to a csv format using the button. We can also filter the logs by Duration, Message Direction, Message Type,

MSISDN and IMEI using the filter button.

## **Exporting the Logs into a csv file:**

Step 1: Click on the "Export" button.

Step 2: The file will be downloaded to your computer. It will be available in the "Downloads" folder in your computer.

#### Tip:

- 1. If you are opening the downloaded csv file in excel, ensure that you are setting the format of the "MSISDN" column to text. This will ensure that the MSISDN shows up correctly.
- 2. To display UTF-8 compliant CSV files when they contain non-English characters correctly, please follow below steps:



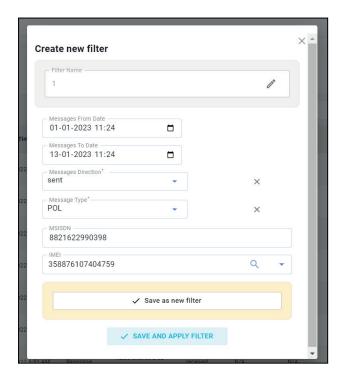




- a. open the CSV file using Notepad.
- b. Click "File > Save As".
- c. In the dialog window that appears select "ANSI" from the "Encoding" field. Then click "Save".
- d. Open this new CSV file using Excel. Non-English characters will now appear correctly in the file.

### Filtering of Logs Data:

We can create our own filters by selecting the Message Direction, Message Type, MSISDN and IMEI.





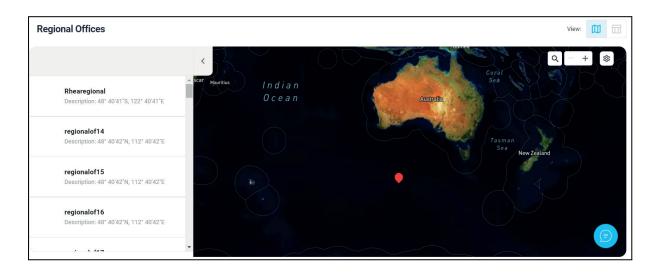


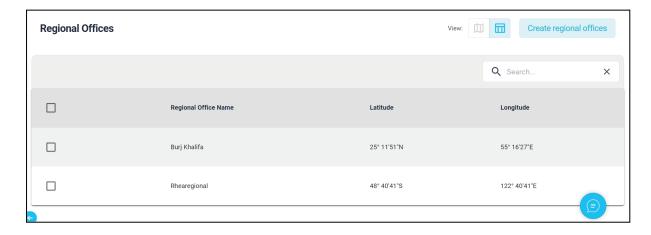


# 11. Regional Offices

Important Note: As an End User, you will be able to view/add/update the Regional Offices.

Regional Offices is a menu item in the top-left corner menu. Regional Offices will have map view and table view. In the map view, regional offices are listed in the left pane and their respective locations are marked on the map. In table view, Regional Office Name, Latitude and longitude details are displayed.











## 11.1 Creating Regional office file for import

The file should be created and saved in csv format. You can create and edit these in a spreadsheet program Microsoft Excel, or in a plain-text tool like notepad. The file should have three columns and up to 100 rows.

The first row should be the header (regionalOfficeName, latitude, longitude). User can enter any name in the regionalOfficeName column, latitude and longitude of the regional office in the second and third column respectively.

Latitude in a decimal degrees format with the following prefix:	Longitude in a decimal degrees format with the following prefix:	
(i) - to denote S	(i) - to denote W	
(ii) no prefix for N	(ii) no prefix for E	
e.g.	eg.	
37.47775	023.88643	
09.56486	126.88161	
-66.43152	-033.98412	
-05.65735	-003.78432	

## **Important notes:**

1. If you open the file in a spreadsheet software like excel, the leading zeroes will be removed (i.e. it will become 1.54675,23.52134 instead of 01.54675,023.52134), which will cause the file to error when uploading onto the portal. You can fix this by either changing the cell to a "text" format in the spreadsheet or opening the file in a plain text tool to ensure the leading zeroes are not removed.







- 2. UTF-8 compliant CSV files when they contain non-English characters. To display correctly, please follow below steps:
  - a. open the CSV file using Notepad.
  - b. Click "File > Save As".
  - c. In the dialog window that appears select "ANSI" from the "Encoding" field. Then click "Save".
  - d. Open this new CSV file using Excel. Non-English characters will now appear correctly in the file.

#### Tips:

- 1. The latitude should always be 2 digits (02, 25, etc) and the longitude should always be 3 digits (005, 012, 123, etc) before the decimal point.
- 2. If the precision for Latitude/Longitude is less than or more than 5 digits after decimal, it will error out and the area will not be loaded onto the portal.

## Sample file:

regionalOfficeName,latitude,longitude regOfcName1,27.67855,-112.67856 regOfcName2,50.60889,-002.01022 regOfcName3,50.85228,001.18129 regOfcName4,52.31639,001.24721

# 11.2 Creating a Regional Office

A new Regional Office can be created by importing a csv file and storing it on the portal.







# 11.3 To import a csv file to create a Regional Office

Step 1: upload the Regional Office csv file using the "Upload Your file" button.



Step 2: Click on "Save" to upload the file and save it on the portal.

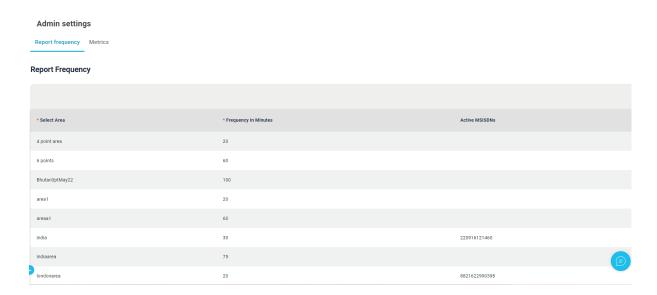
# 12. Admin

## 12.1 Admin Settings

Admin settings include report frequency and metrics settings.

## 12.1.2 Report Frequency

Important Note: As an End User, (based on the permissions provided to you by the Level 1 user) you will be able to update the Report Frequency.









When a vessel enters any of the areas - the value configured as "Frequency" corresponding to the entered area will be assigned to "Tracking By Time - Interval" and configured on the terminal. When the vessel exits the area, the "Tracking by time - Interval" will revert to the previous value.

#### **12.1.2 Metrics**

User can update the metrics configuration in this menu. Below are the metrics available:

- 1. Speed options are "Kilometre/hour" and "Knots"
- 2. Weight options are "Kilogram" and "Pounds"
- 3. Temperature options are "Celsius" and "Fahrenheit"
- 4. Distance options are "Kilometre" and "Miles"
- 5. Height options are "Metres" and "Feet"

When the user chooses a metric here and clicks on save, all the values on the portal will be updated to reflect values in the selected metric.

#### 12.1.3 Notifications

Notifications allows the user to send notifications to the selected user roles when any SOS comes in.



Selecting the users you want to notify and clicking on "Save" will send notifications to the selected users whenever an SOS comes in from any of the vessels for this user.



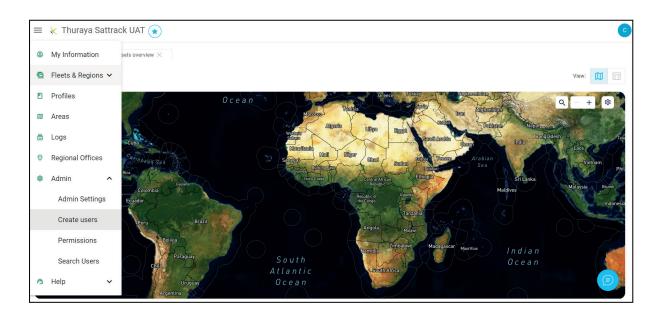




#### 12.2 Create Users

Important Note: As an End User, you will be able to create users only if you are a Level 1 user. As a level 2 or level 3 End user, you will not see this menu.

Create Users is a Sub menu item under the Admin menu in the top-left corner menu.



#### 12.2.1 Add New User

Clicking on this button at the bottom of the Users list will allow you to create a new level 2 & level 3 user.

A new row is added to the table. Fill in the details into the new row.



Click on the ✓ button to save the user.

The newly created user will receive an email with their credentials.







#### 12.2.2 Edit User

Click on the menu beside the user created & click edit option.





User can update primary fleet and Level & Click on the 

✓ button to save the details of the user.

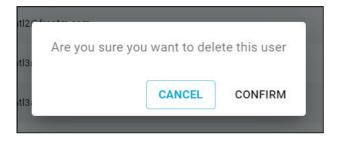
#### 12.2.3 Delete User

Click on the menu beside the user created & Select Delete User



option.

Click on Confirm to delete the user.



#### 12.3 User Permissions

Important Note: As an End User, you will be able to access this menu only if you are a Level 1 user. As a level 2 or level End user, you will not see this menu.

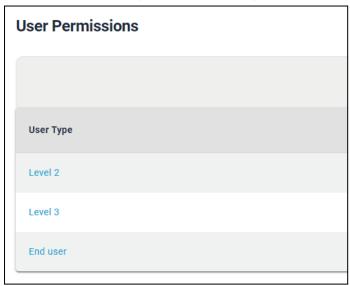
This allows the End User Level 1 User to provide/revoke permissions to Level 2 and Level 3 End User Users.



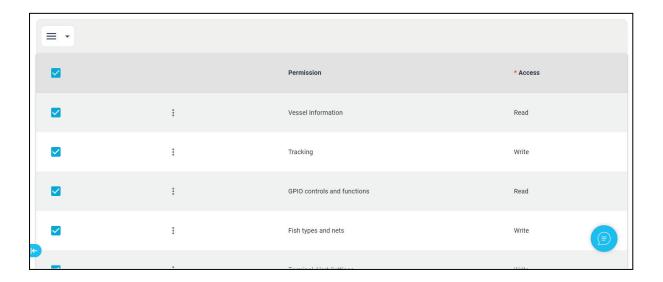




Select the user type for which you want to view/edit permissions.



Select the features to provide access & select the access (Hidden, Read or Write). Access for the selected user type will be updated.



## 12.4 Search Users

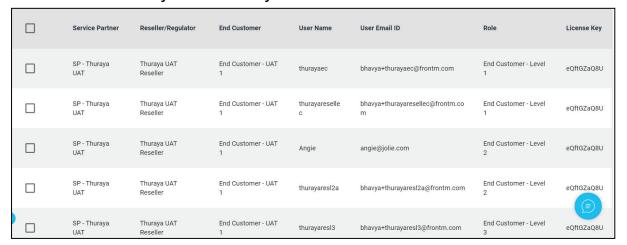
Search users tab list all the users under your hierarchy. Search Users include Service Partner, Reseller/Advanced profile users, End Customer, User Name, User Email ID, Role and license key information of all the users.





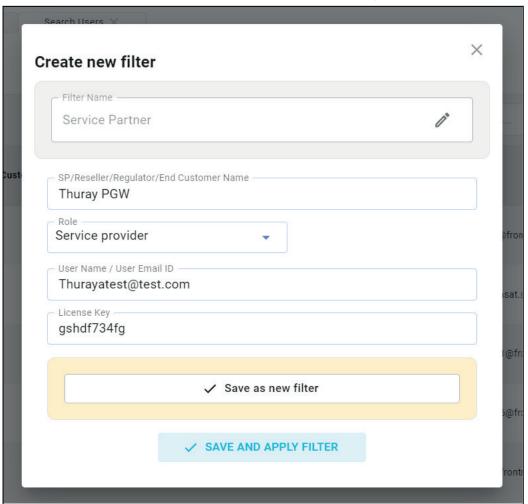


# User can search by License key and Customer Name.



#### **Filtering of Users:**

We can create our own filters by filling in SP/Reseller/Regulator/End customer name, Role, Username, License key details.









# 13. Help (on portal)

There is a help menu available on the portal. On clicking the menu at the top left, a "Help" menu is available. This menu has the following sub menus:

**FAQ's & Support**: Clicking on FAQ's menu will open a new tab with following subtabs -

- 1. Frequently Asked Questions: This tab includes a series of questions that are commonly asked by customers.
- 2. Support: Thuraya Customer Care details.

**Download End User Manual:** Clicking on Download End User Manual will download this End user manual. The file will be downloaded to your computer. It will be available in the "Downloads" folder in your computer.

# 14. Permissions

You will have the permissions to remotely program or retrieve some data from the terminal (notifications and request for information from the portal to the terminal, reporting from the terminal to the portal and configuring the terminal) based on the table below.

You will, however, be able to view all the data even where you do not have the permission to retrieve or configure it.

For more detailed access levels provided as a default, refer to <u>Standard</u> profile End User Permissions

Important Note: If you request to change the Captain password, your request will be routed to the immediate next level for approval.



