REALPTT Dispatcher Manual

Content

Overview

REALPTT dispatching console is a multi-functional visual scheduling software based on REALPTT system. It has video, monitoring, broadcasting, group call, single call, positioning, tracking, track checking, checking call records, sending short messages and pictures, etc. Function, capable of scheduling accurately and quickly.

Conceptual description

➢ **Group Call**: After entering the group, you can make calls to all online users in this group, and you can also receive calls from other users in the group.

➢ **Invite Dynamic Group**: The dispatcher can select one or more online

users to initiate an invitation, establish a temporary talk group, and perform partial user intercom.

➢ **Speaking Group**: The speaking group is the group that the dispatcher is talking on. In this group, the dispatcher can make a call to this group and can also hear the group's speech.

➢ **Force to Join**: The dispatcher can force a user to enter the group.

➢ **Disconnect**: The dispatcher can force a user to leave the group.

➢ **Stun**: The dispatcher can force a user to go offline and unable to login.

➢ **Monitor**: The dispatcher can listen to the voice of multiple groups, that is, the speech of each listening group, which can be heard by the dispatching console.

➢ **Call Logs**: View the voice record and play it back. The record is saved on the computer and can be found in the software installation folder.

➢ **All Call**: Can call all of the groups that this dispatcher licenses joined.

➢ **Group Broadcast**: Call members for all online users of the current group, regardless of whether the users in this group or not. (Not yet, will be soon)

➢ **Video Call**: initiate a video request to a single user, and the video call can be made after the user agrees. The dispatcher and radio can hear voice each other, see each other.

➢ **Video Monitor**: Multiple users can be monitored and monitored without the user's consent.

➢ **Photo Record**: Record the information that the dispatching station sends and receives pictures.

➢ **Tracking**: Real-time monitoring of a user's positioning trajectory. (Not yet)

➢ **Mute**: Turning on mute will not hear the user voice.

一、 Dispatcher Interface

1.1 Interface Partition

After the user successfully logs in to the dispatching station, the main interface of the console operation is displayed：
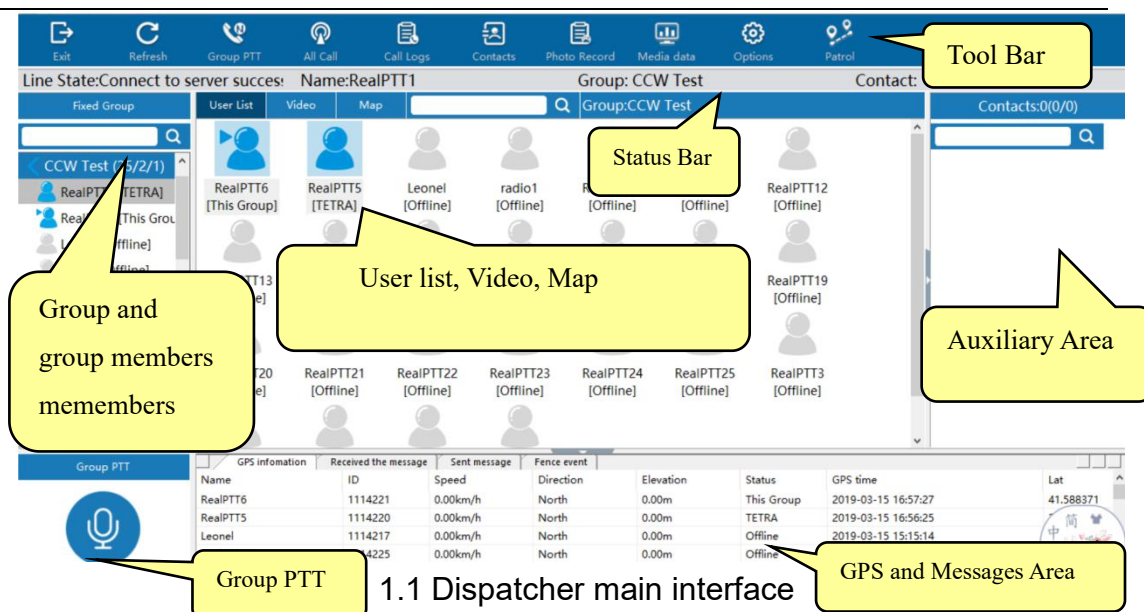
1.1 Dispatcher main interface

As shown in the figure above, the main interface of the dispatching station consists of the following parts:

- **Tool Bar**: it includes "Exit","Refresh", "All Call", "Call Logs", "Contact", "Photo Record", "Media Data", "Options", "Patrol", etc.
  - **Status Bar**：Display the network status of the dispatching station, the name of the group, the name of the dispatching station, and the speaker;
  - **Groups and member lists**: Located on the left side of the main interface, showing all the groups and group member information that the account has joined;
  - **User list, video, and map display area**: Located in the middle of the main interface, displaying the information status of the members of the selected group, the video and the screen of the monitored user, and the positioning information of the user in the map；
  - **Auxiliary area**: Located on the right side of the main interface, assists in displaying some functions of the dispatching station, such as call records, buddy lists, picture records, etc；
  - **Group PTT button**: Click this button to perform group call;
  - **GPS and message area**: Located below the main interface, it displays the sent messages, received messages, and user location information and fence event dynamics.

1.2 Icon Description:

Icon	Interpretation
The icon of the users status	
	Online user, also in this group
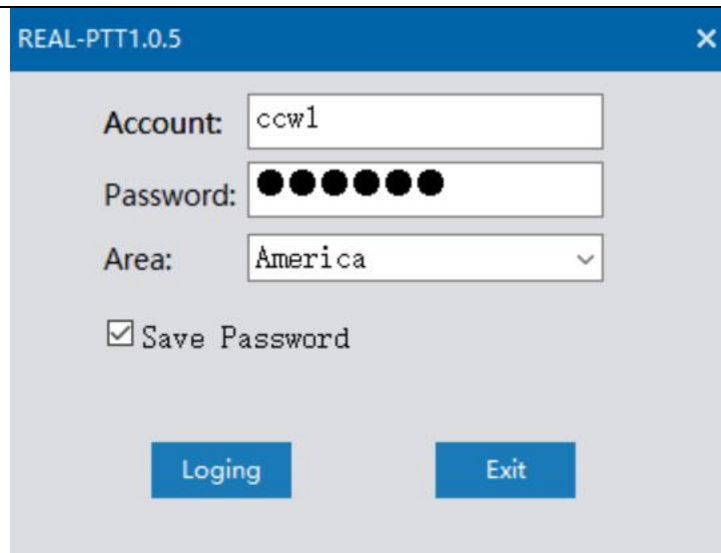
	Online user, but not in this group
	Offline user
用户定位状态图标	
	User with GPS in this group.
	User with GPS but not in this group.
	Offline users
Hot key icon	
	PTT Button
	Mute icon
Tracking icon	
	Tracking Start point
	Each point
	Stop point
	End point

二、 Operation Introduction

2.1 Login Dispatcher

Open the console software, enter the account password on the login interface, check "Save Password", choose Area then click "Login", as shown below.

The account used to log in to the dispatching console is a user account created from the web management platform. The account cannot be logged in simultaneously with the radios, you can create a dispatcher account to login this PC dispatcher.

2.1 Login Page

2.2 Tool Bar

2.2 Tool Bar

➢ **Exit**：Exit this time login;

➢ **Refresh**：Refresh users and group details;

➢ **Group PTT**：Start this group call

➢ **All Call**：Start all of this dispatcher joined group to make call；

➢ Group Broadcast：Can call all of this group online users, no matter this group user in this group or not.(This not ready in this version, maybe near future.)

➢ **Call Logs**：View the most recent audio record. The call log details are viewed in the auxiliary display area on the right, as shown in Figure 2.3. Double-click the record to play the record. The call log is saved on the computer, and the folder for the call log can be found in the folder where the dispatcher is installed.

➢ **Contact**：The contact who shows the account is shown in Figure 2.4. You can private call the user by double-clicking on the contact. The right-click menu can perform operations such as "send message" and "Stun" for the selected user.

➢ **Photo Record**: Display the sending and receiving records of the picture, click to view the picture, right-click picture to display the local directory where the picture is stored.

➢ **Tracking**：Real-time monitoring of the positioning trajectory of selected users; (Not ready yet, will be soon.)

➢ **Options**: You can make some changes to the settings of the console. For example: shortcut settings for the PTT button, time zone settings, voice encoding settings, whether the map pops up, and whether to browse the image browser that comes with the window.

> ➢ **Patrol**: You can check the users patrol result and details. (Not ready yet, will be soon.)
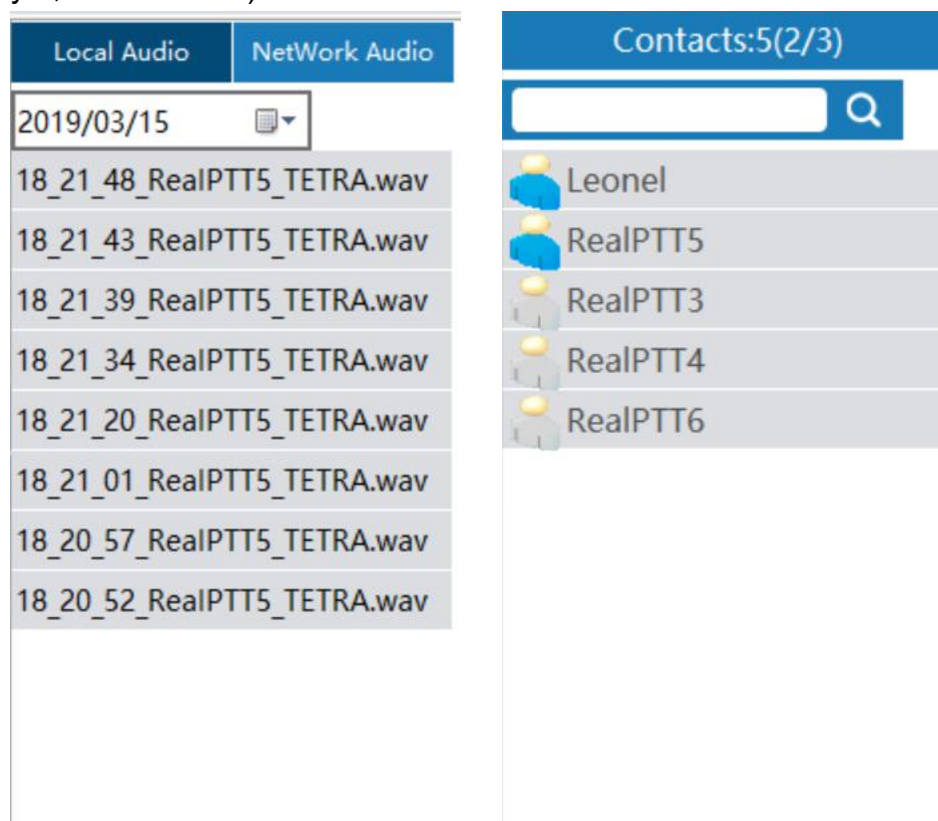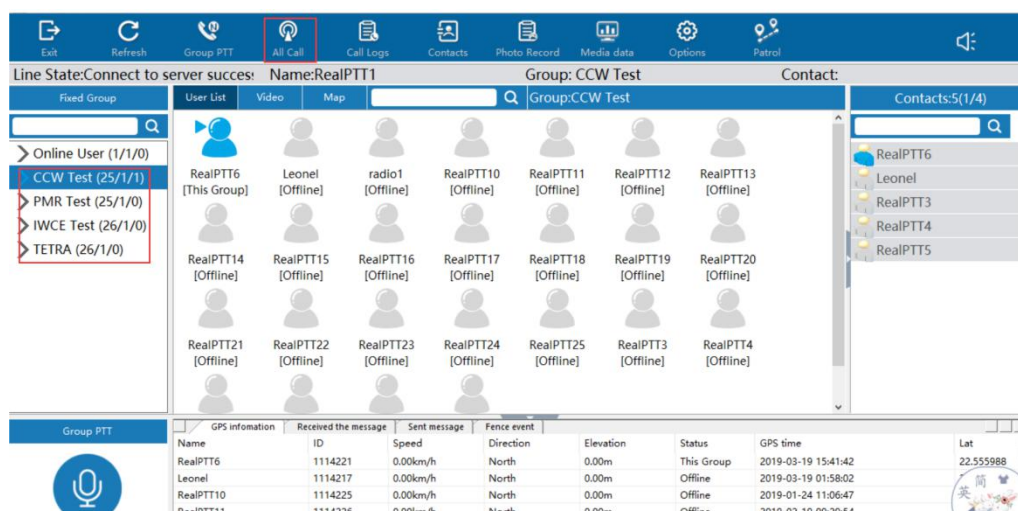

| 2.3 Call Logs | 2.4 Contact List |

2.2.1 All Call

Click the All Call button to speak, all members of the different groups taht the users can hear dispatcher voice.


2.5 All Call

2.2.2 Call Logs

The Call Logs divided local audio and network audio, you can double click

each audio then reply. ① The local audio is save on the computer, it only record the audio from the dispatcher logged, you can find the local call logs on the installation files. ② Network audio then it need the licenses with save audio function, the network audio save on the server, you can from the web platform to check all of the audio.
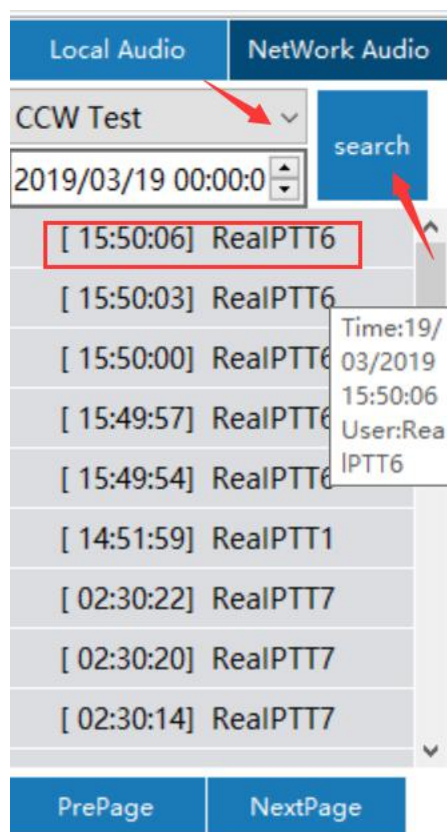
2.6 Call Logs

### 2.2.3 Contact

The contact is used to display the account's contact. You need to add a contact to the account in the web platform, and check the contact function to display it. Selecting an online contact to double-click will pop up the "PTT Call" option, which can establish a private call with a contact. Select the right button of the contact to perform the "send message" and "Stun" operations.
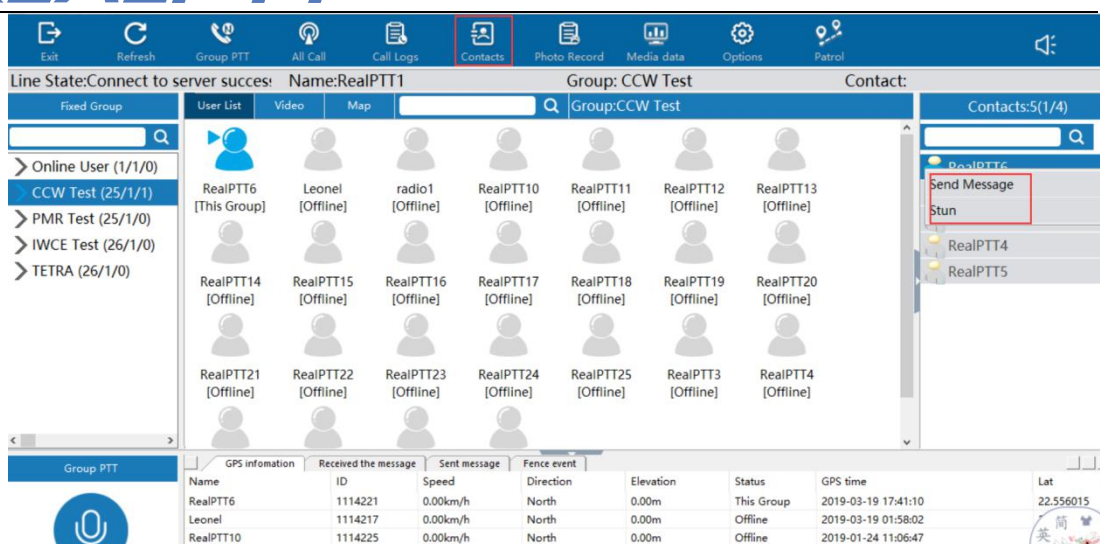
2.7 Contact

2.2.4 Photo Record

Display the send and receive records of the picture, double-click to view the picture, select the right button to open the picture at the folder location.
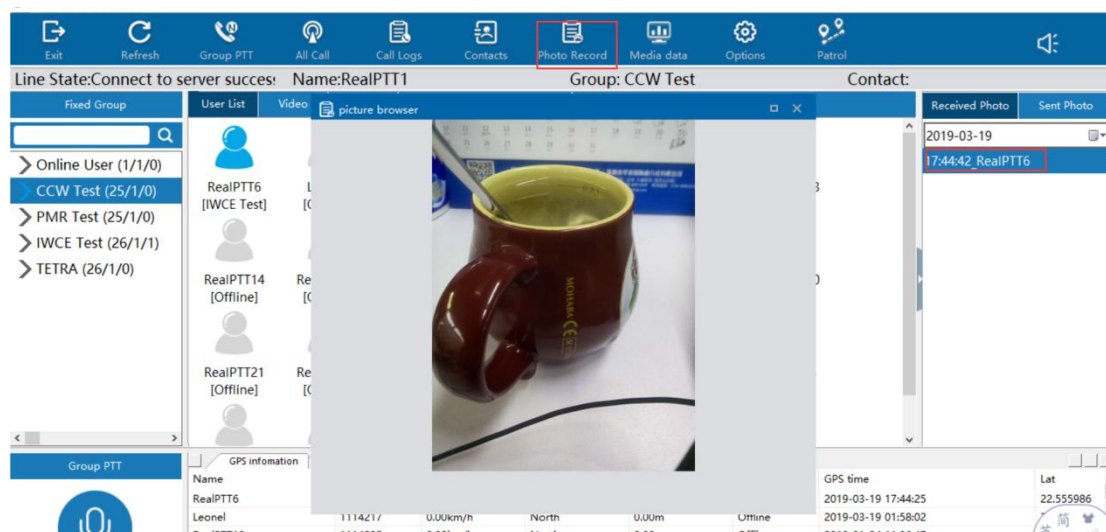
2.8 Photo Record

2.2.5 Media Data (Not finished yet, will be soon.)

2.2.6 Options

Setting PTT hot key: You can as your request to setup hot key on the keyboard then press PTT button to call.

Time Zone: You can as your country time zone to choose the correct one, otherwise it will be effect the GPS time on the map.

Distance: You can choose different unit of the bottom dispatcher speed.

8KB voice codec: If you choose 8kb voice codec then your radio must be is 8kb voice, otherwise cannot communicate each other, because most radio is default use 4kb voice codec. 4KB is low voice quality, 8kb voice codec will be with high

voice quality.

Map Popup: If you choose this one, then when you open map, it can full screen to show map independent.

Video Popup: You can make the video page independent show.

Use win picture browser: it means you can choose to use the photo record by the default browser.

PTT continues to talk: if you choose this one, then you do not need press PTT button all time, you just need click PTT when you start talk, then finished talk you click PTT.
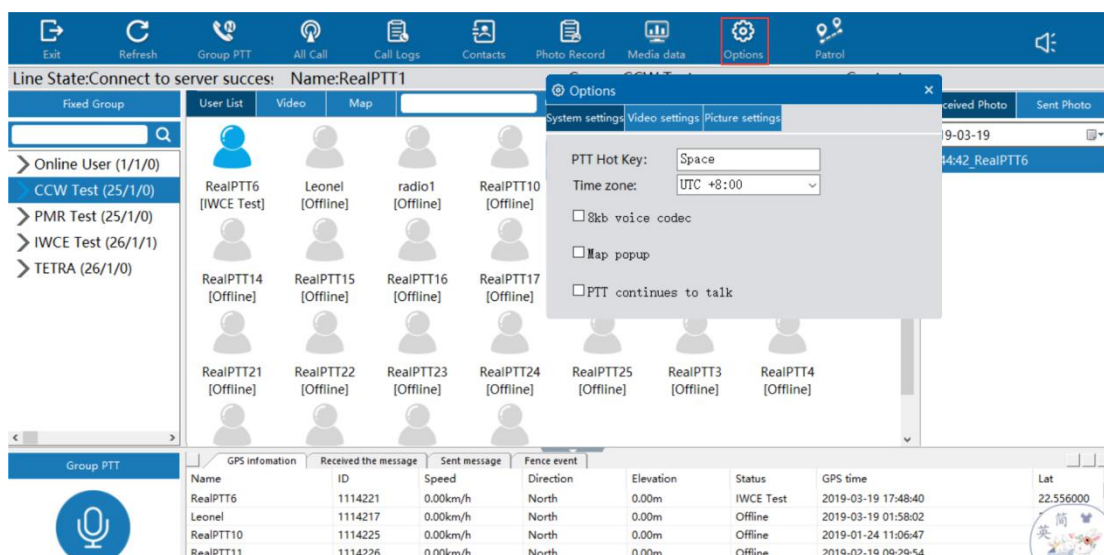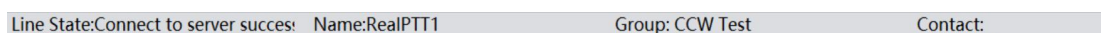

2.9 Options

2.2.7 Patrol

All details will be coming soon.

2.3 Status Bar

The status bar is used to display the connection status of the network, the name of the account, the group where the account is located, the user who is speaking, etc.


2.10 Status Bar

2.4 Group Details

The group list will list all the group information added by the dispathcer account, the purple arrow indicates that the dispatching station is monitor the group, and the blue arrow indicates the group where the account is currently located.

Select a group double click to enter the group, right click on the group to perform the following operations on the group：

➢ **Send a message**: send messages to all this group users.

➢ **Leave conversation**: leave current group, no more in this group communication.

➢ **Force to join user**: Make all this group users come into this group to communication.

➢ **Disconnect user from group**: Make all this group users leave this group, no more in this group communication.；

➢ **Enter into group**: Enter into the   group that you choose.

➢ **Monitor this group**: Monitor the group that you choose.

➢ **Add multi group show in map**: You can add this group users show on the map, then view this group users location.
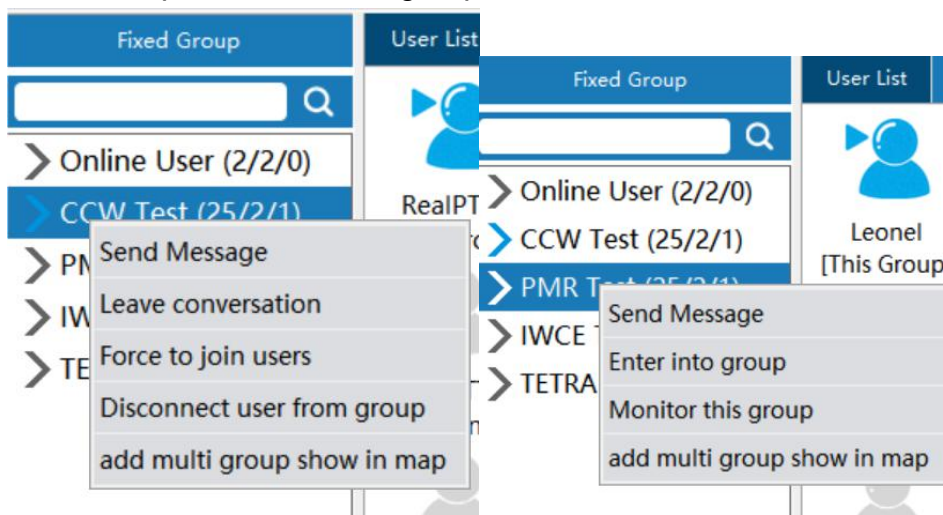

2.11 Group Details

2.4.1 Send messages to group

Select the right button of the group, click Send Message, enter the content to be sent, and click "Send Message". The user who is online will receive the message. The sent message can be viewed in the information display area.

Send messages to members (2/3G linux radio only can have 20 characters, 4G linux radios can get 200 characters from dispatcher.)

Message set means you can setup the message in advance, so when you send messages then you can messages template to fast send messages.
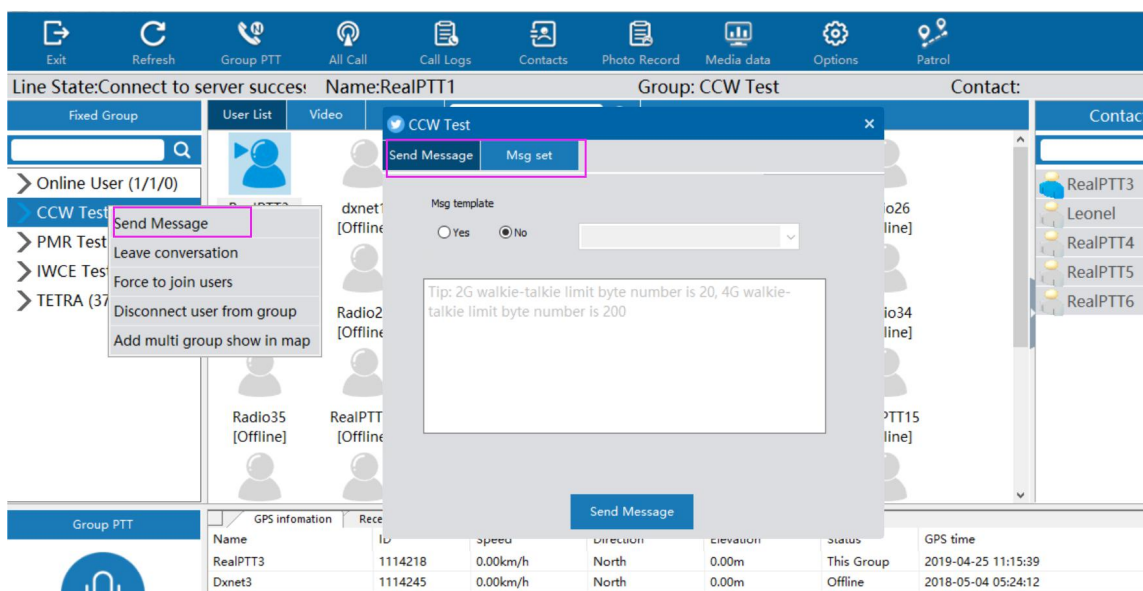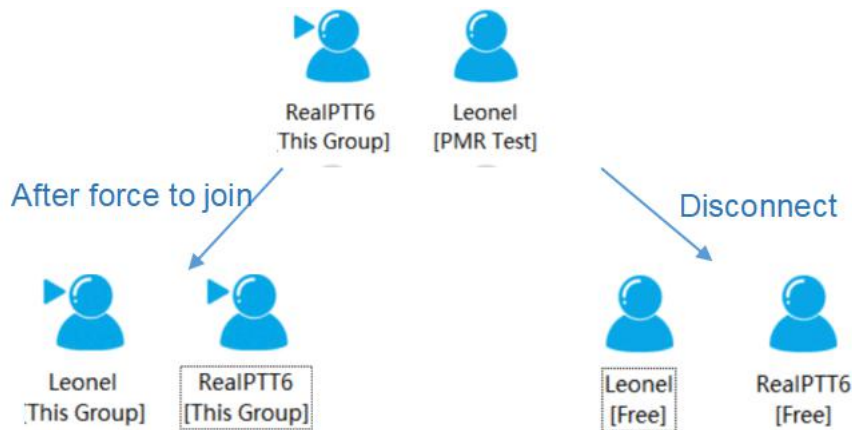
2.12 Send Messages

2.4.2 Force to join & Disconnect

Force to join: Right click the group that you choose when click "force to join", then this group users will be force to come into this group to communication.

Disconnect: Right click the group that you choose then click "Disconnect" then this group users will be disconnect, leave this group.


2.4.3 Monitor Group

Select another group right button, click to monitor this group, you can hear this group voice, the arrow is purple then means this group already monitored by this dispatcher. (**One group only allow 5 people can monitor**.)
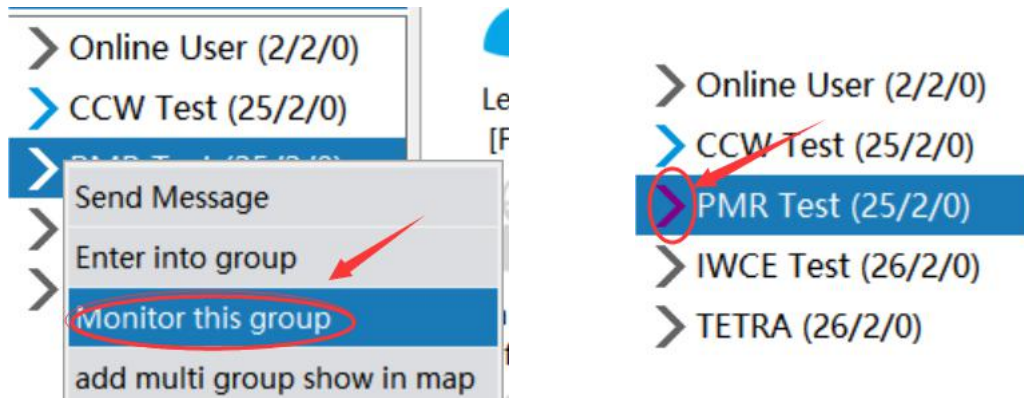
2.14 Monitor group

2.4.4 Add multi group show in map

Right click on "Add multi group show in map" and switch to other groups. The member positioning of the group will always be displayed on the map. Right click on Cancel to cancel the display of the members of the group on the map. The group displayed by the added group map is marked with a red icon.
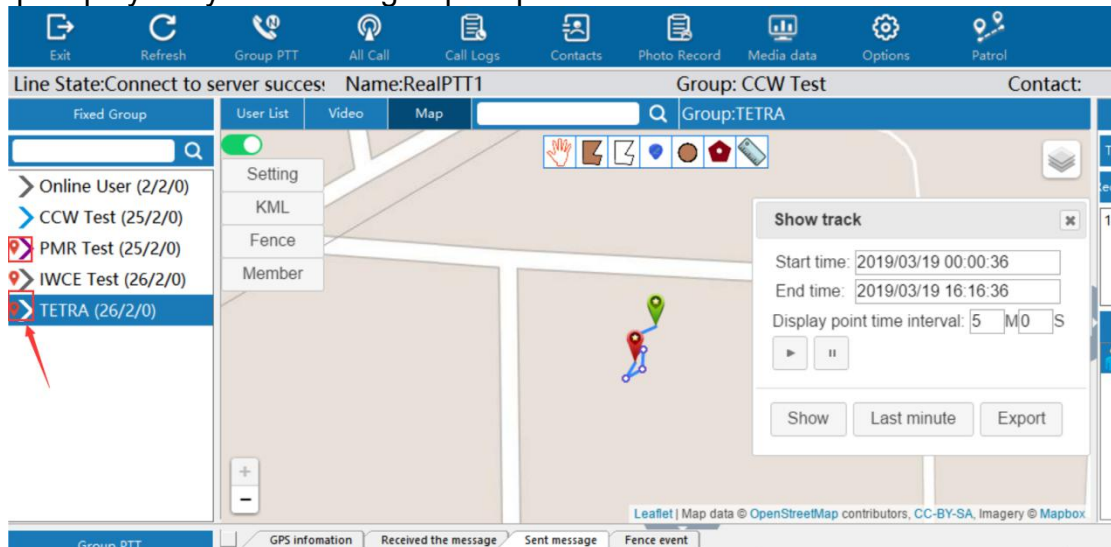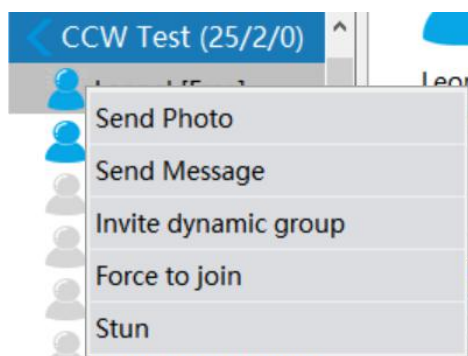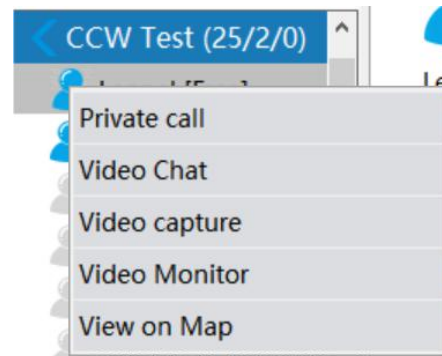

2.15 Add multi group show in map

2.5 User Details

Select the online user **right-click** operation: send photo, send messages, invite dynamic groups, force to join, Stun, remote, etc.;
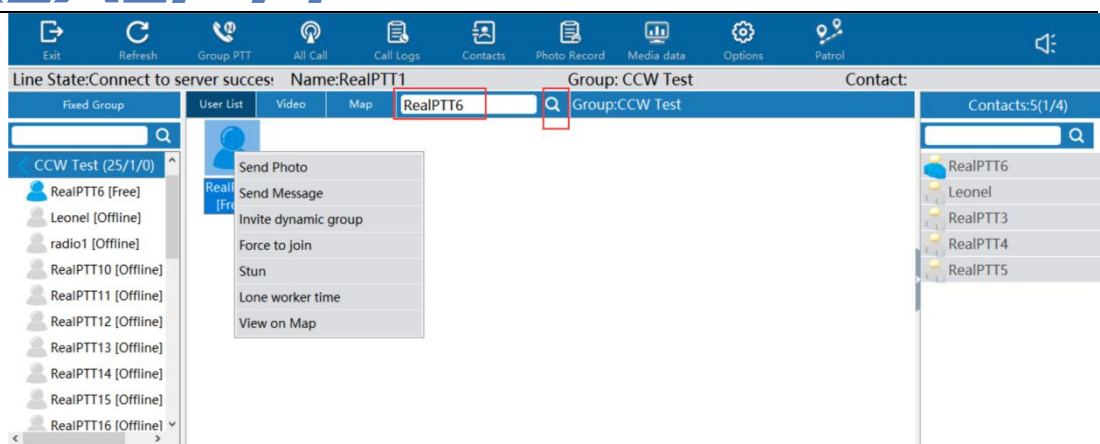
Select user **double-click**: Private call, video call, video capture, video monitor, view on map, etc.

2.16 Right click user
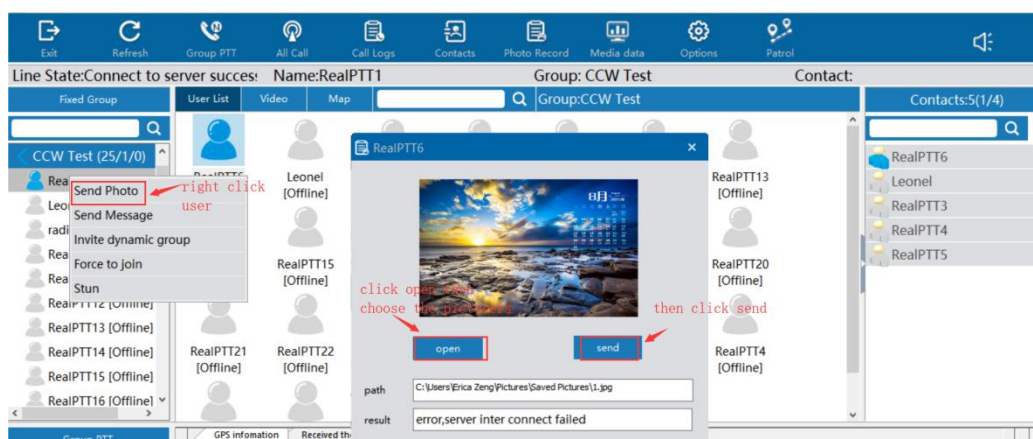

2.17 Double click user

2.18 User list details

Selecting the online user right click in the user list can send messages, invite dynamic group, foce to join, stun, lone worker time, view on map.
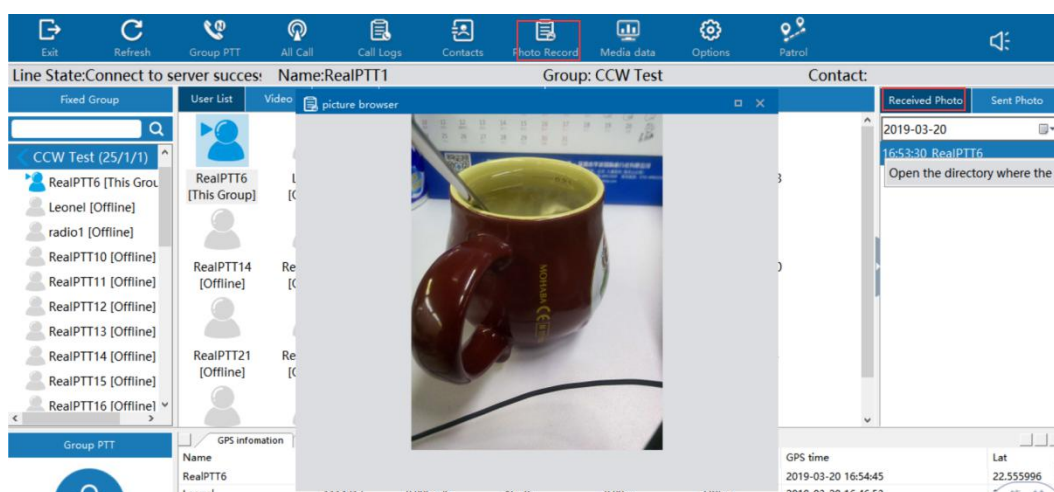
2.5.1 Send Photo

Select the user then right click, choose "Send photo",

2.19 Send photo

Click on the photo record in the toolbar to view the send and receive records of the picture in the auxiliary display area. Double-click the record to open the picture. Select the record right button to view the location of the picture in the local folder.

2.5.2 Send Messages to user

Select user to right click of the online user, select Send message, input the content to be sent, and click "Send Message". Messages sent and received can be viewed in the information display area below.
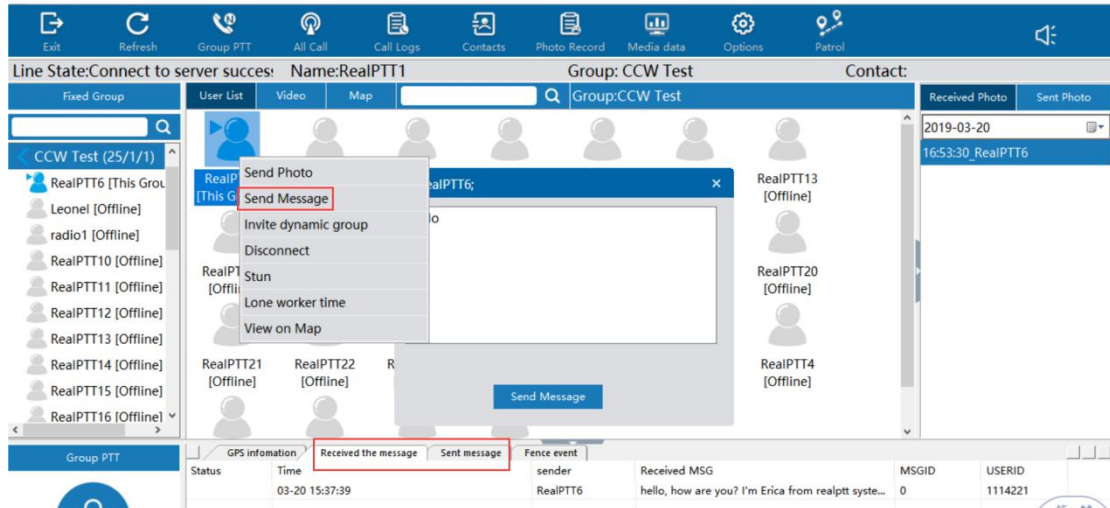
2.21 Send Messages to users

2.5.3 Invite Dynamic Group

Press shift key to select multiple online members, then right click on "Invite Dynamic Group" to create a new dynamic group. And the group name is the user who created this dynamic group to be this new dynamic group name. Double click to enter other groups and the temporary group is dissolved.
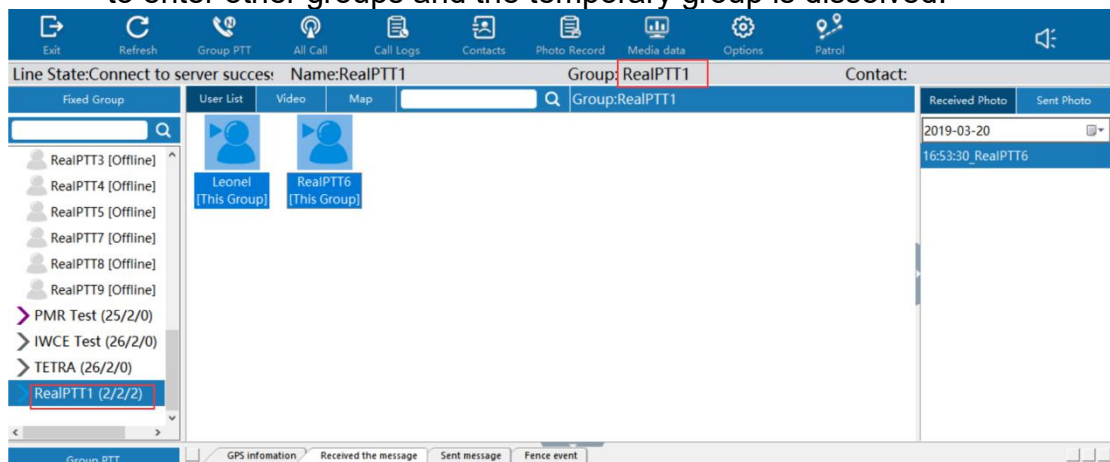

2.22 Invite Dynamic Group

2.5.4 Stun

After clicking Stun, the user is forced to go offline, the user status is also offline, and the account status becomes pause. It needs to be reactivated on the web company platform then it can be used normally.

2.5.5 Lone Worker time

Select the user, right click "Lone worker time", add monitoring time, if the user does not speak during the monitoring time, an alarm prompt box will pop up, indicating that the user has no communication activity during the monitoring time, and the user icon will display busy status.
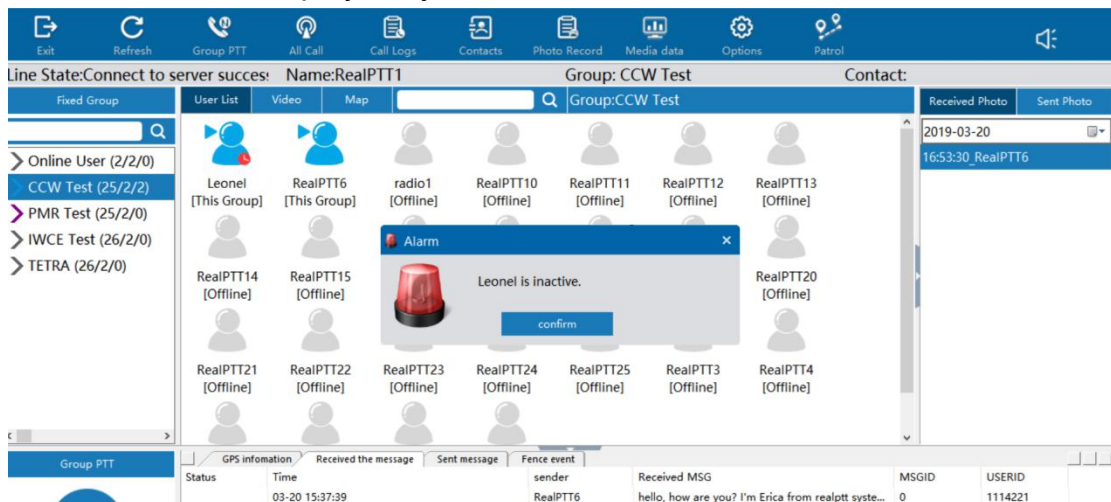

2.23 Lone Worker time

2.5.6 View on map

You can choose user right click then "view on map" to check the history tracking of users. Or you can go to map then right click users on the map to choose "show tracking".
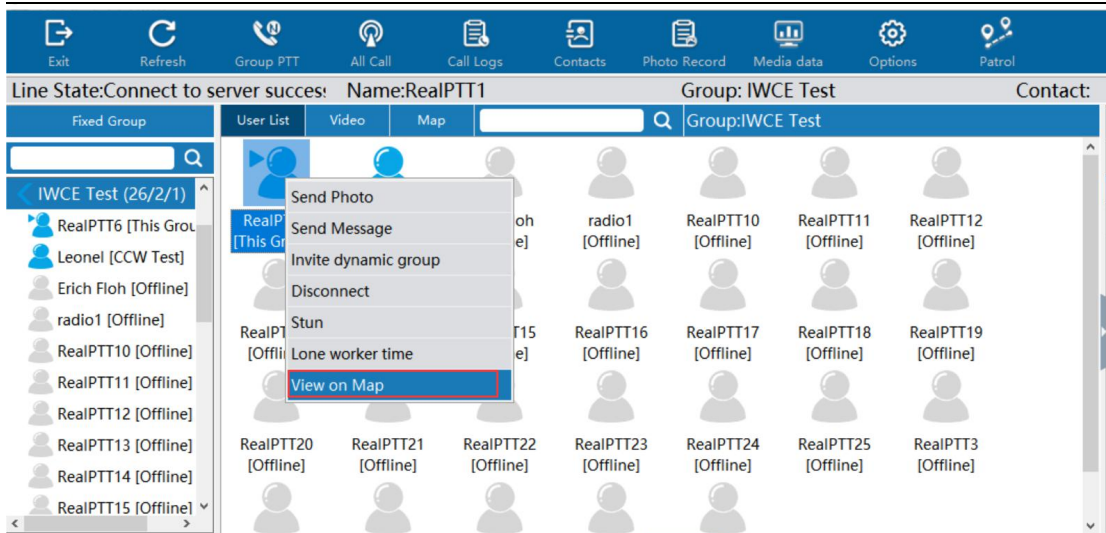
When you click view on map or show tracking of the user, then you can make the mouse to the users to see the last time this user uploaded GPS time, if the user last time upload GPS is 10:00am 2019-3-20, then you only can get the tracking less than this time, cannot over this time. If the user upload GPS point is same, then unable to show tracking, it will be remind less than 2 points gps, so you can try to change the start time and end time to check another time tracking.
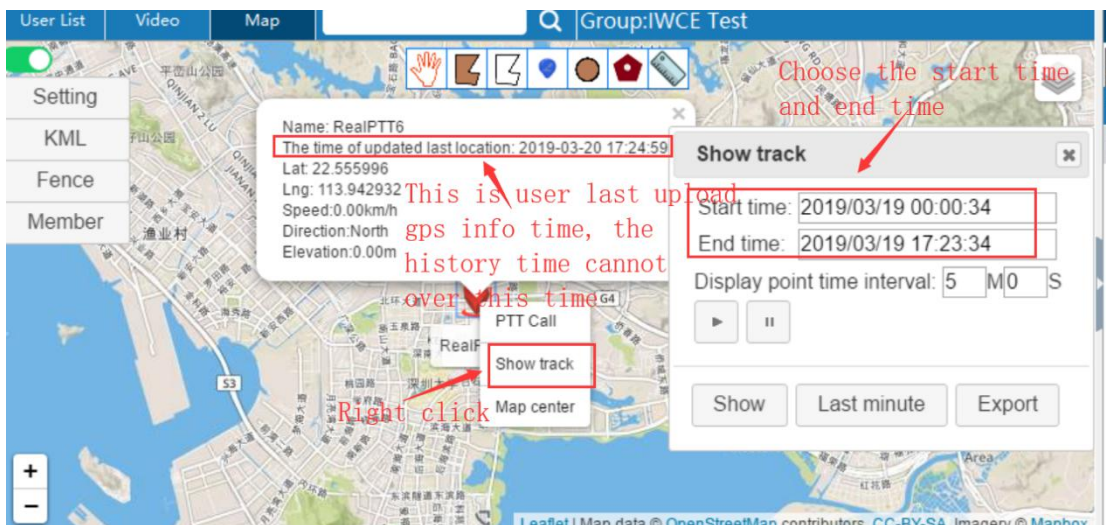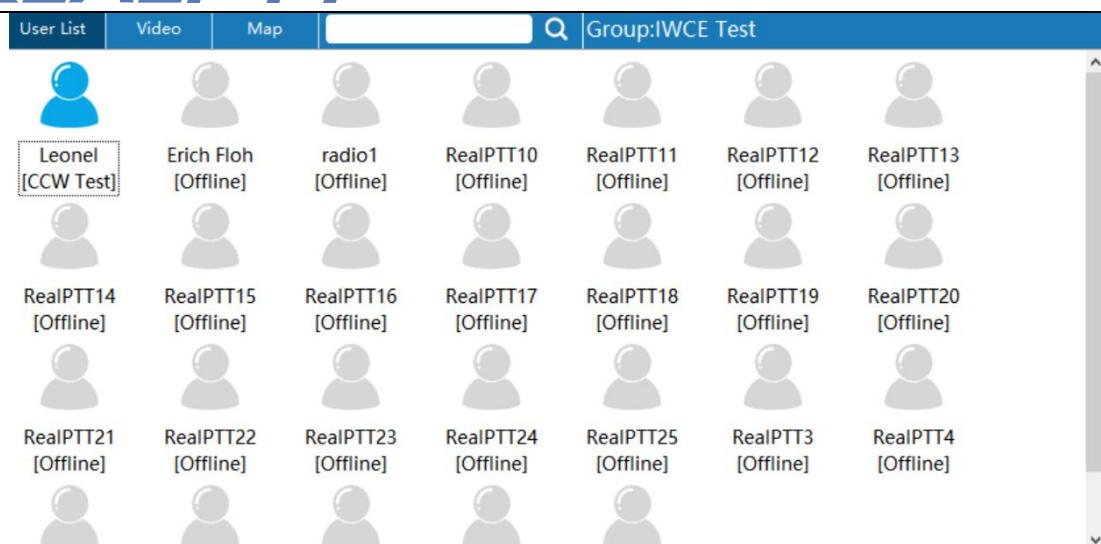

2.24 View on map

2.5.7 Tracking (Not finished yet, will be soon.)

2.6 User list/Video/Map

➢ **User List**

The user list mode is used to display group user information, including the status of the user, the name of the user, and the group information of the user.
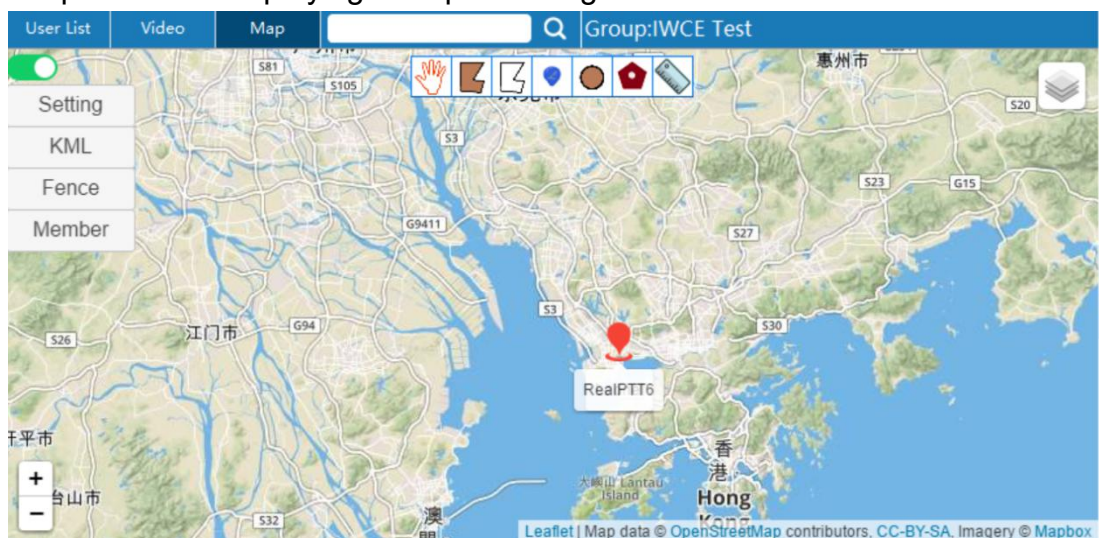
2.25 User List

➢ **Video Model**

The video mode is mainly used to display video call and video monitor, it can perform 32 channels of the video monitoring at the same time.

2.25 视频模式

➢ **Map**

Map mode for displaying user positioning and track information.

2.26 Map

三、Video Function

The dispatcher account need choose "Video" function on the web platform then can login this dispatcher to show video mode. The radio hardware need buy video function from the platform also with camera to support video. The video model is divided into video chat, video capture and video monitor. The video call can only be performed for 1 user, if user is video chat then unable to press PTT to communicate.

3.1 Video Chat

Select the user to double click on "Video Chat" and wait for the other party to accept the video call. If the other party does not respond, the video call will automatically end after 20 seconds. If the other party accepts the video, the video call is successfully established. When the other party sends a video request, a prompt box for the video invitation will pop up in the lower right corner.
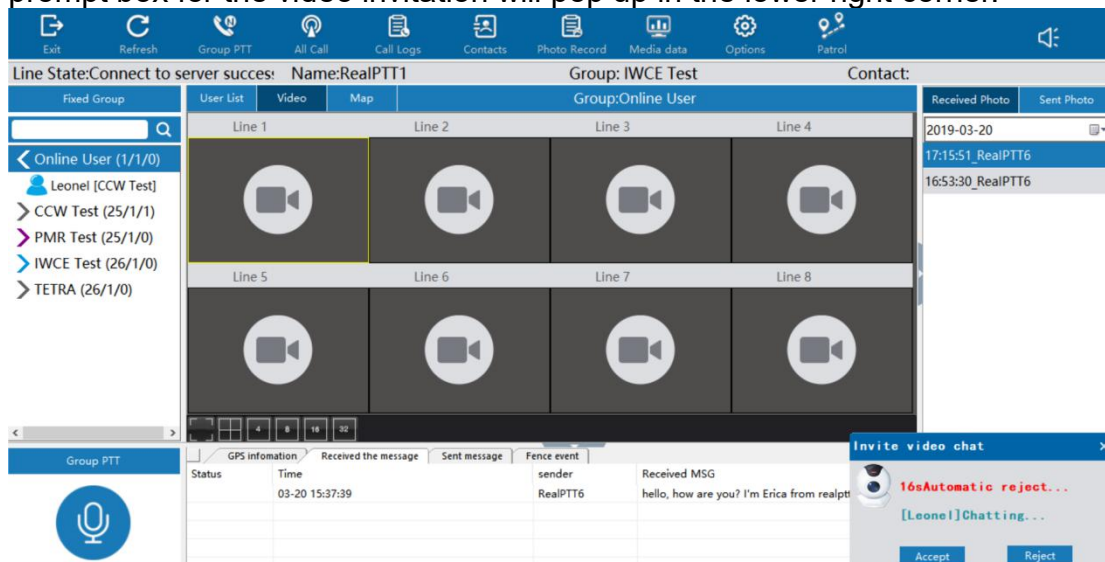
3.1 Invite Video Chat

At the video top map, you can click "hang up", then the video will be finished. The video interface show 6 small icon: Mute model, screenshot, resolution, rotate, switch and forward. If you choose mute, then cannot hear the voice from user, users cannot hear dispatcher too, but you can hear the voice from this group members for PTT; Screenshot means you can catch the video screen to save pictures; Resolution means you can choose different resolution; Rotate means you can rotate this video, Switch means you can choose the background camera or in front of camera; Forward means you can forward this video to other users.
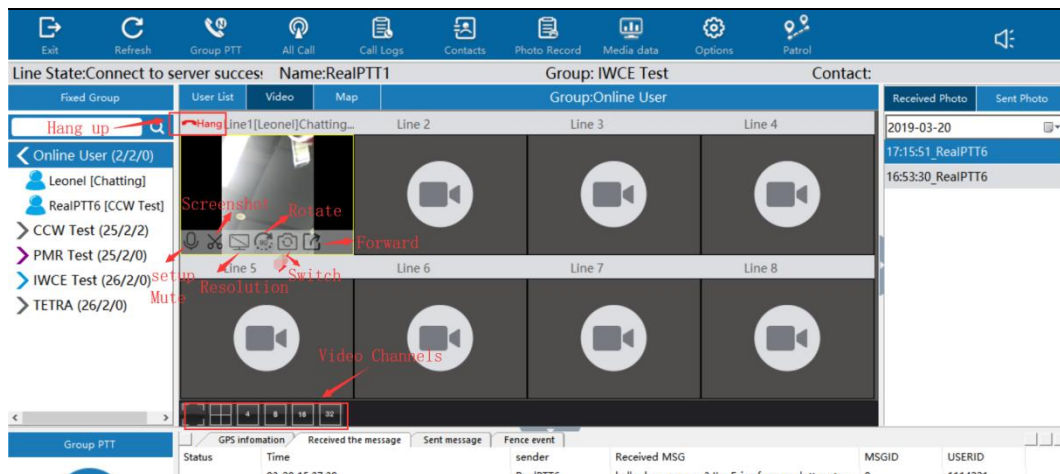
3.2 Operate Video

Double click on the video interface and the video interface will be zoom in full screen.

3.3 Full screen video

3. 2 Video Monitor

Select the online user to double-click to select video monitoring to monitor the user terminal device. This monitor do not need accepted by users, and they will be not know this monitor, video can monitor 32 channels at the same time. At the monitor mode, the dispatcher still can hear the group voice, one side can group call, one side can monitor radios.
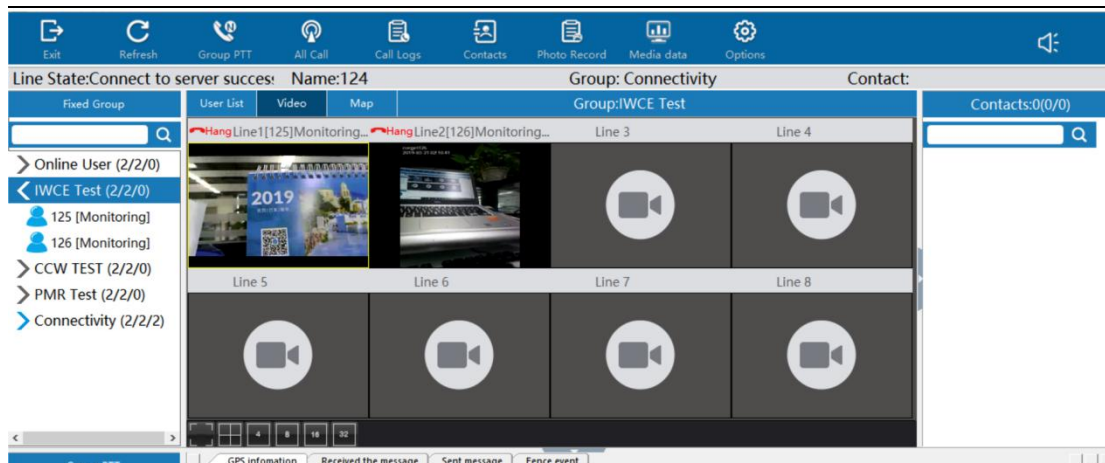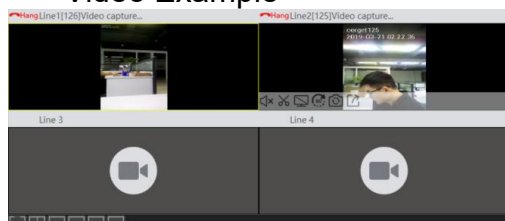
3.4 Monitor Users

3. 3 Video Capture

Select the online users to double-click, then choose "video capture" so you can monitor this users, this capture also do not need users accept then can monitor, but the users can know his radio already by monitored, that is different with video monitor.
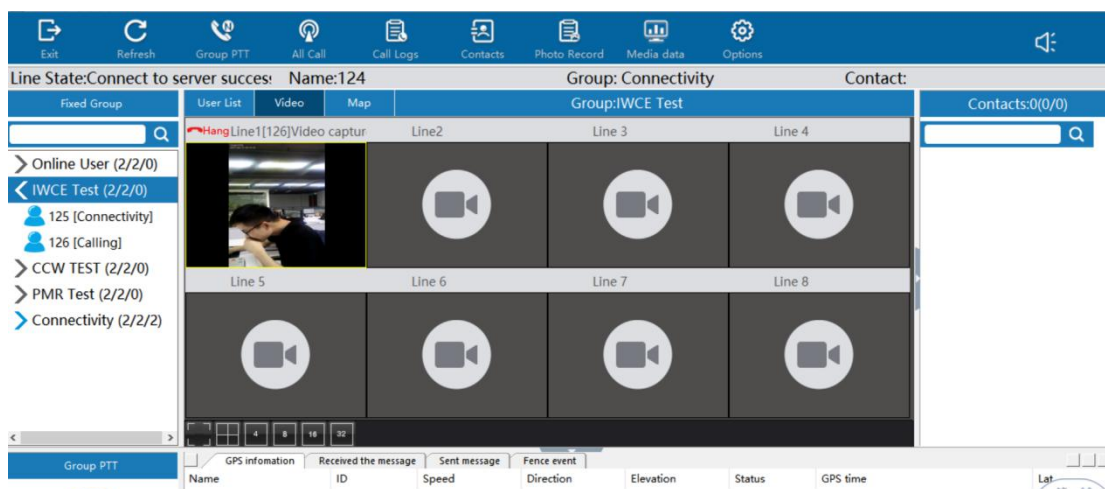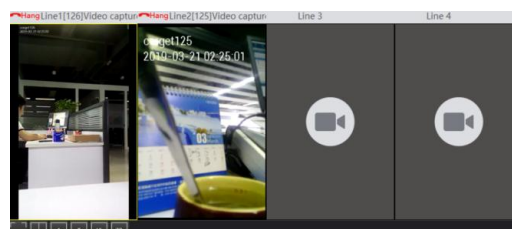

3.5 Video Capture

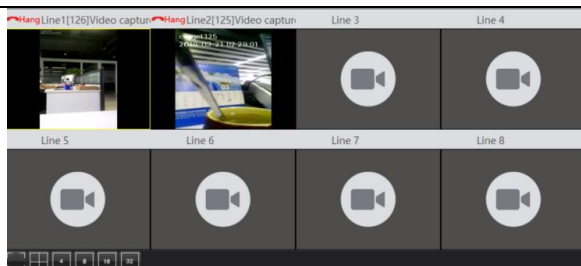## 3. 4 Video Example

Video Example

4 Channels

4 Channels

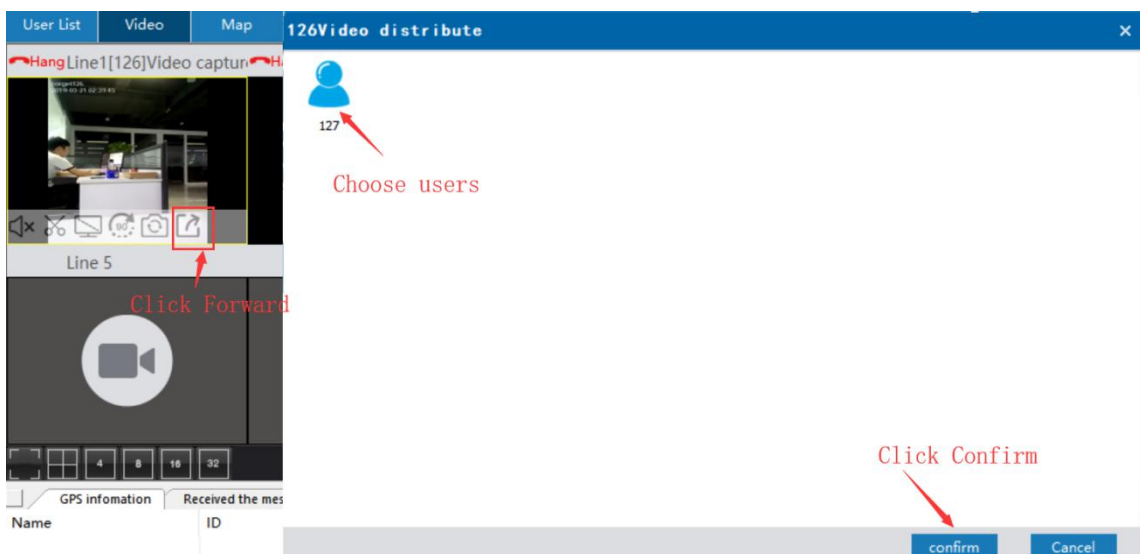8 Channels   16 Channels

3.6 Multi-Channels Switch

3. 4 Video Forward

After clicking the video forward pop-up interface and selecting the user to click Confirm, the video can be shared to the selected user in real time.

3.6 Video Forward

四、**Map**

View user location need setup the user account functions: ① the licenses need choose GPS positioning on the web platform; ② The dispatcher also need have "view location" & "display group members" two functions, ③ The radio need have GPS functions, then open the GPS and need outside of the radios. ④ The radio need positioning successful then upload gps info to server then can see on the dispatcher map, otherwise any point of this is failed cannot see the location on the map.

The map function is mainly used to view user positioning and tracking, and can also set operations such as electronic fence, route marking, ranging, circle calling, etc., and can also customize user icons. The map interface is mainly divided into a positioning and track display area, a function operation area and a function setting area.
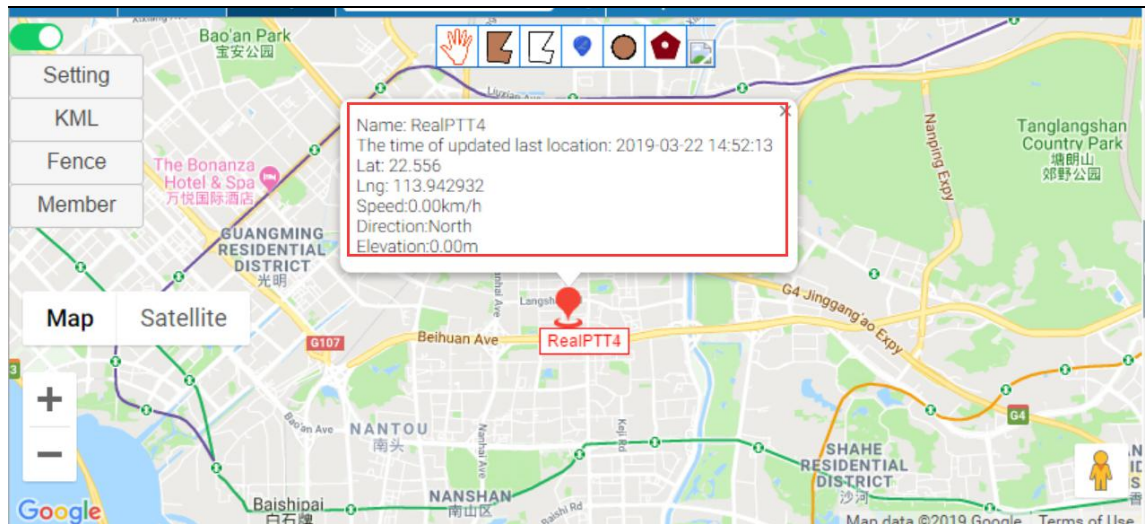

4.1 Location and Tracking
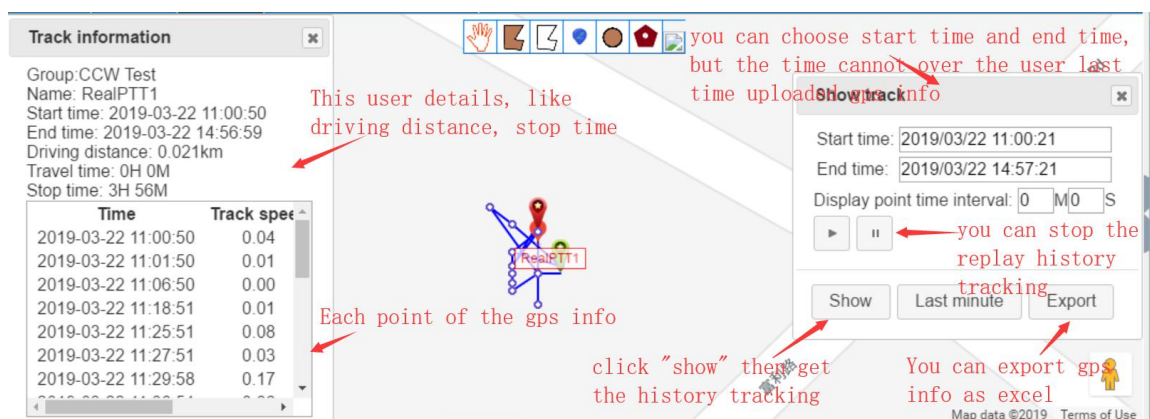
4.1.1 View Location

Make the mouse on the user icon then will be show the users last time location details, Like name, the last time uploaded GPS time, Lat, lng, speed, direction and elevation.

4.1 User Location

4.1.2 View user tracking

You can choose user then right click "show tracking" then setup the start time,end time then can get the history tracking during this time.


4.2 User Tracking

4.2 Functions Operation Area

The top functions area includes geo-fencing, draw fencing, draw line, mark,

multiple selection, polygon selection and distance measurement.

4.2.1 Geo-fencing

Click on the geo-fence, click on it to draw the electronic fence on the map interface, double-click to complete the drawing input name, enter the name and click to confirm, you can display it in the fence list, you can delete and display the fence.
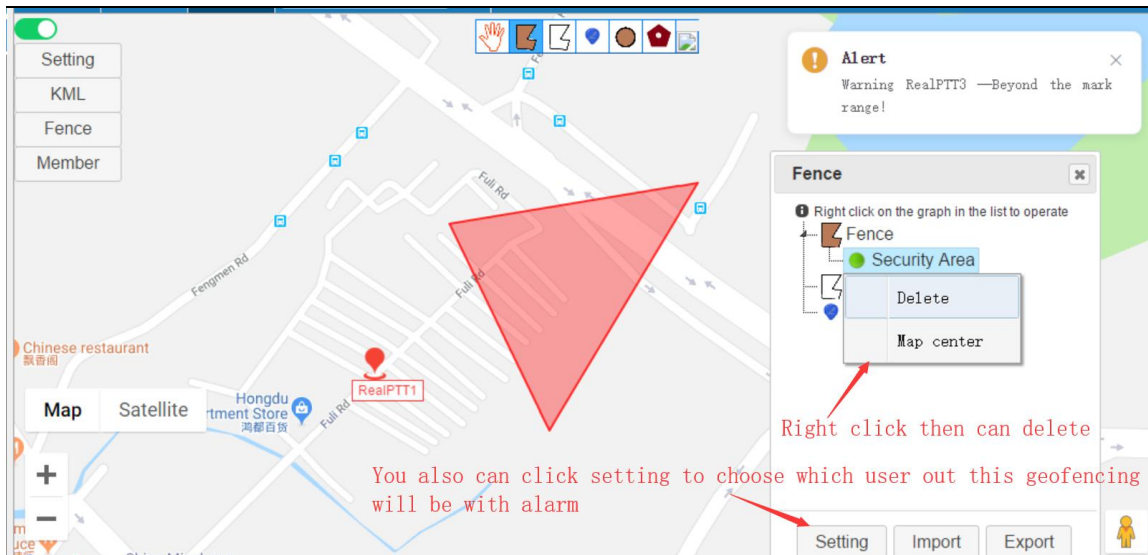
4.3 Geo-fencing

4.2.2 Draw Line

After clicking, draw line on the map interface. Double-click to finish drawing then input name. After entering the name and clicking to confirm, it can be displayed in the fence list, and the fence can be deleted and displayed.
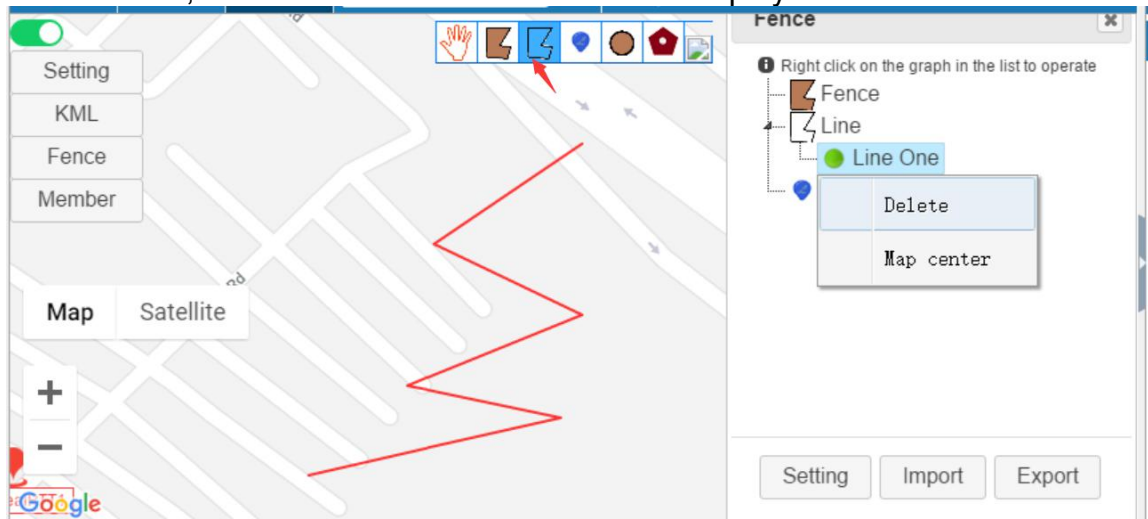

4.4 Draw Line

4.2.3 Mark

After clicking, draw mark on the map interface. Double-click to complete the input name. After entering the name and clicking Confirm, it can be displayed in the fence list, and the fence can be deleted and displayed.
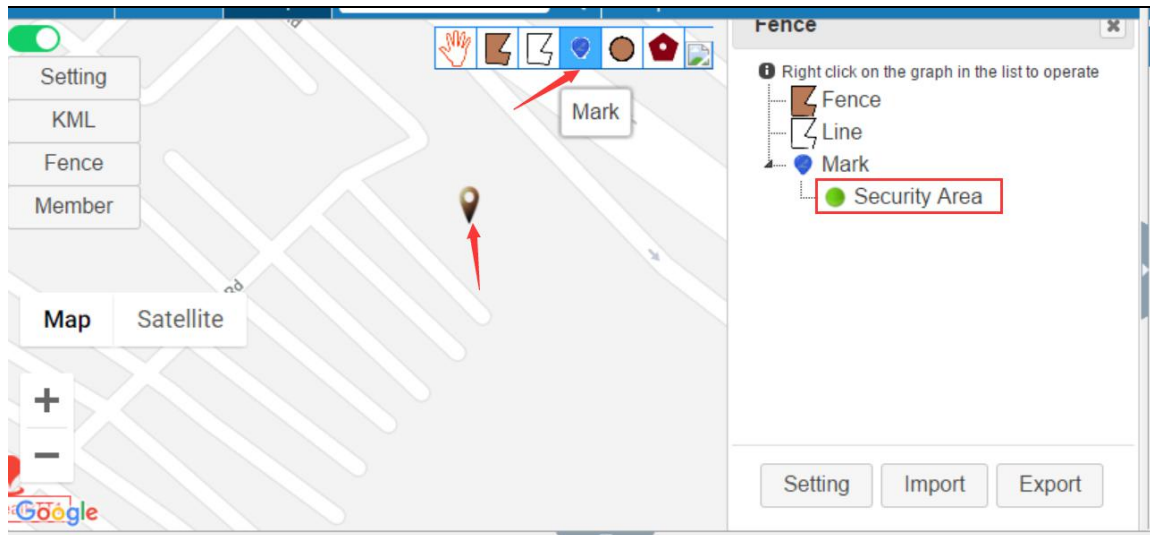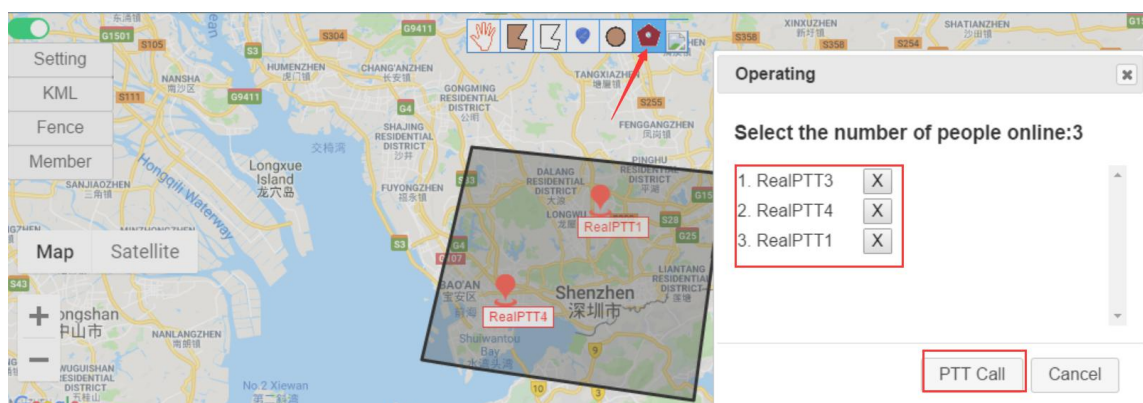
4.5 Mark

4.2.4 Multiple and Polygon Selection

Circle selection is used to select a user on the map to create a temporary dynamic group for communication. Click the circle icon, then circle the user on the map interface. After selecting the user, click "PTT Call" to create a temporary group.
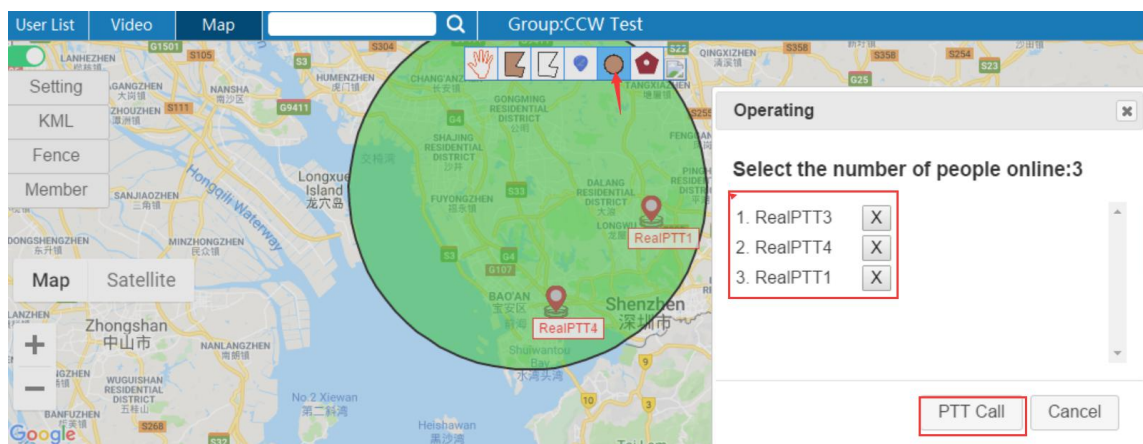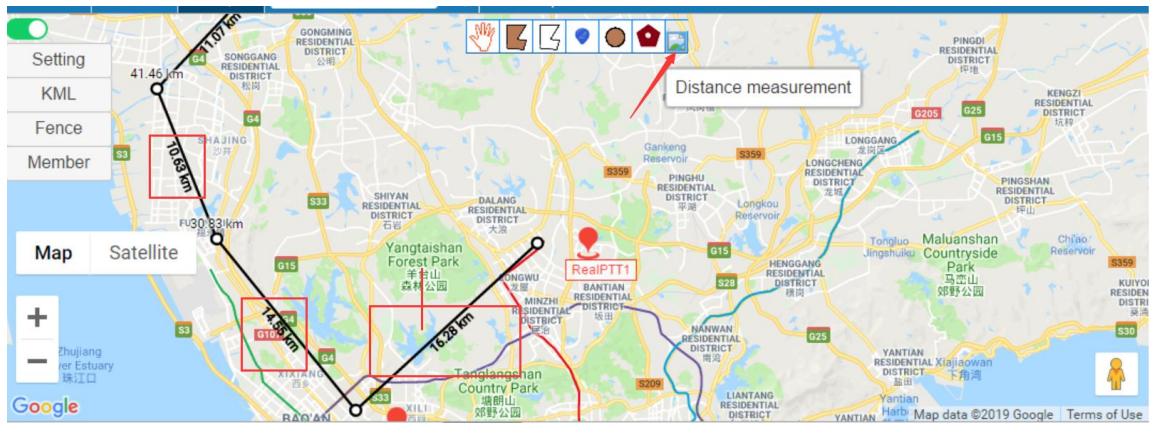

4.6 Multiple Selection

4.7 Polygon Selection

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4.2.5 Distance Measurement

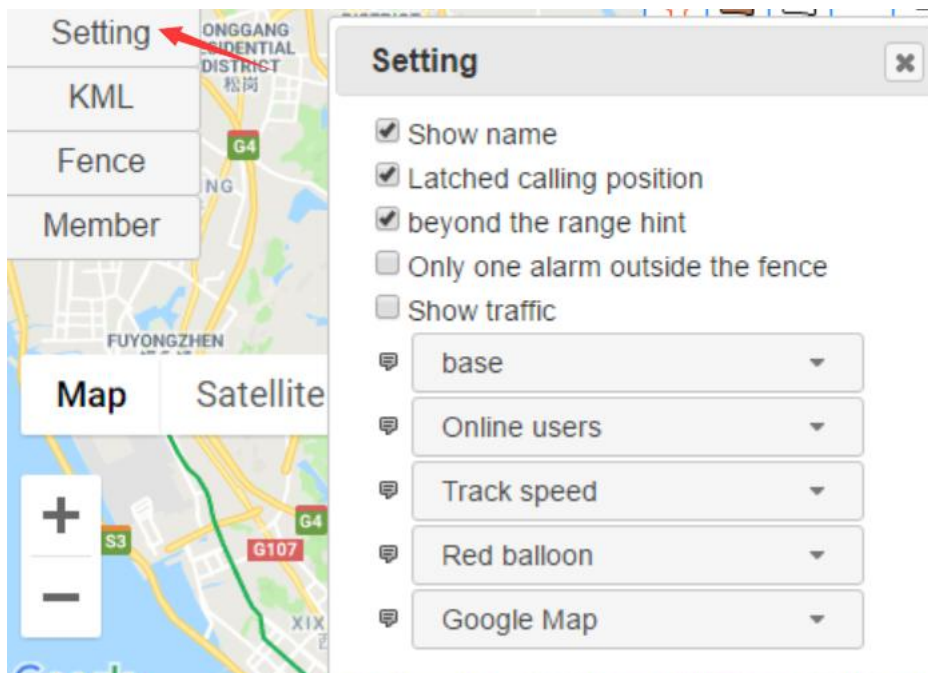A tool for making straight line measurements on a map.

4.8 Distance Measurement on the map

4.3 Setting Functions Area

4.3.1 Setting

Setting main includes show name, latched call position, beyond the range hint, setup base color,location, track speed, setup user icon and choose map.
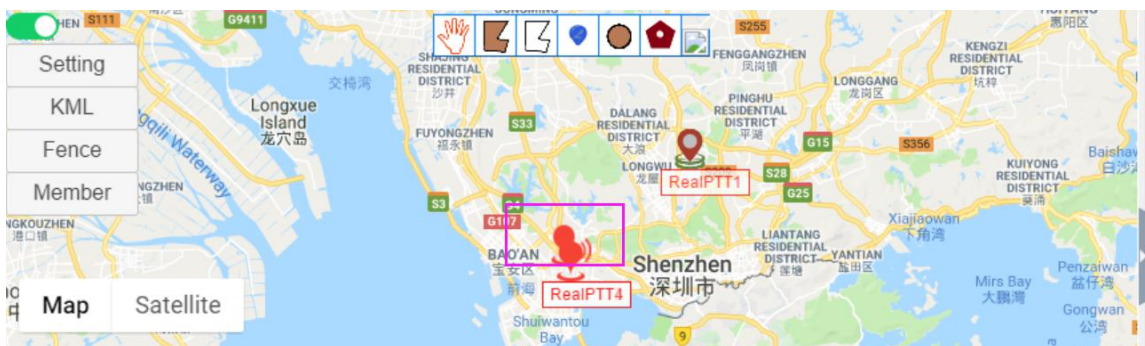

➤ **Show name**
Click to check or remove the hook line to see if the user name is displayed on the map interface.
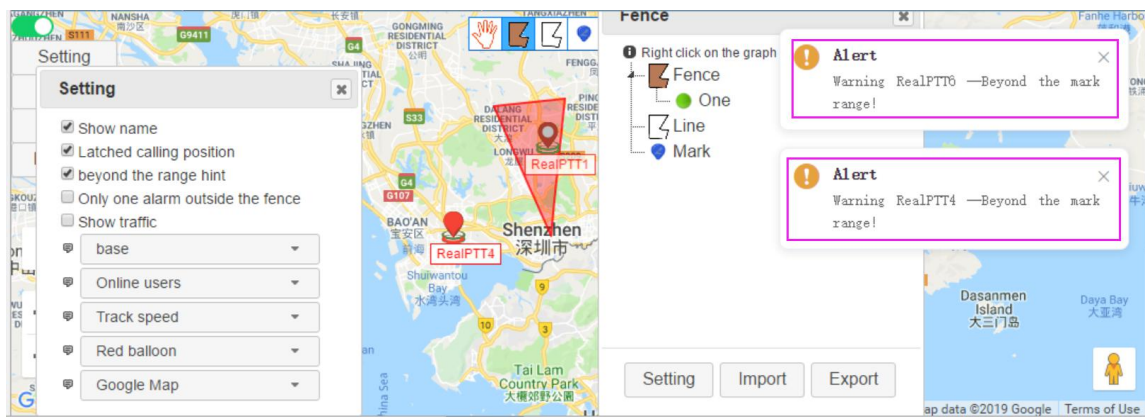
➢ **Latched Calling Position**

In the upper column of the map interface, check the speaker in the group, the map will follow the speaker's location, and the speaker's position will be displayed in the center of the map.
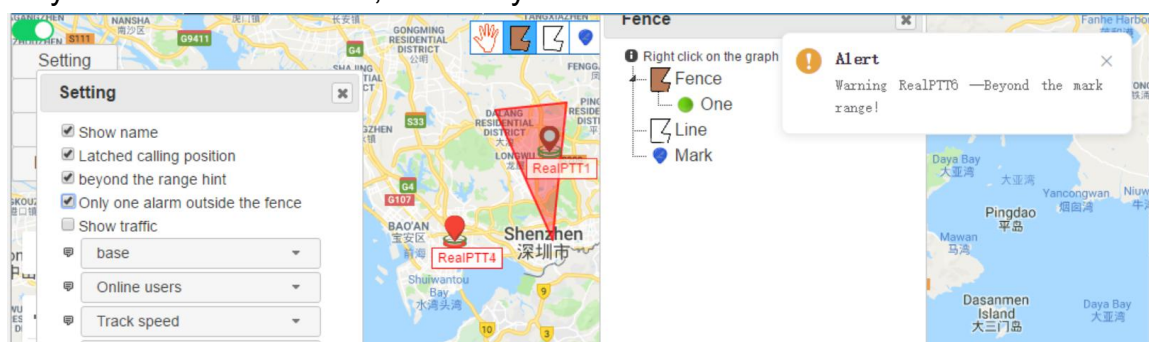

➢ **Beyond the range hint**

After checking this setting, there will be an alert after the users position is out of the geo-fencing.
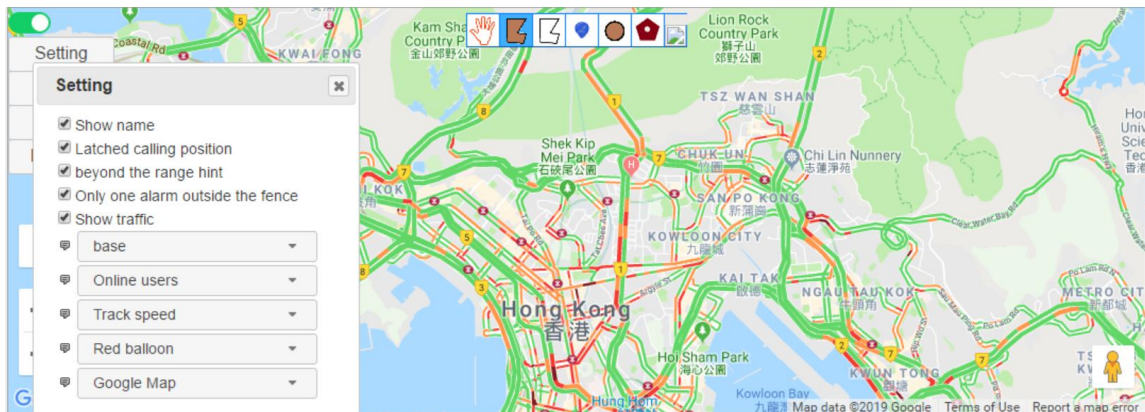

➢ **Only one alarm outside the fence**

It means you choose this setting then each user out of this geo-fencing then only alarm at the first time, not always with alarm.
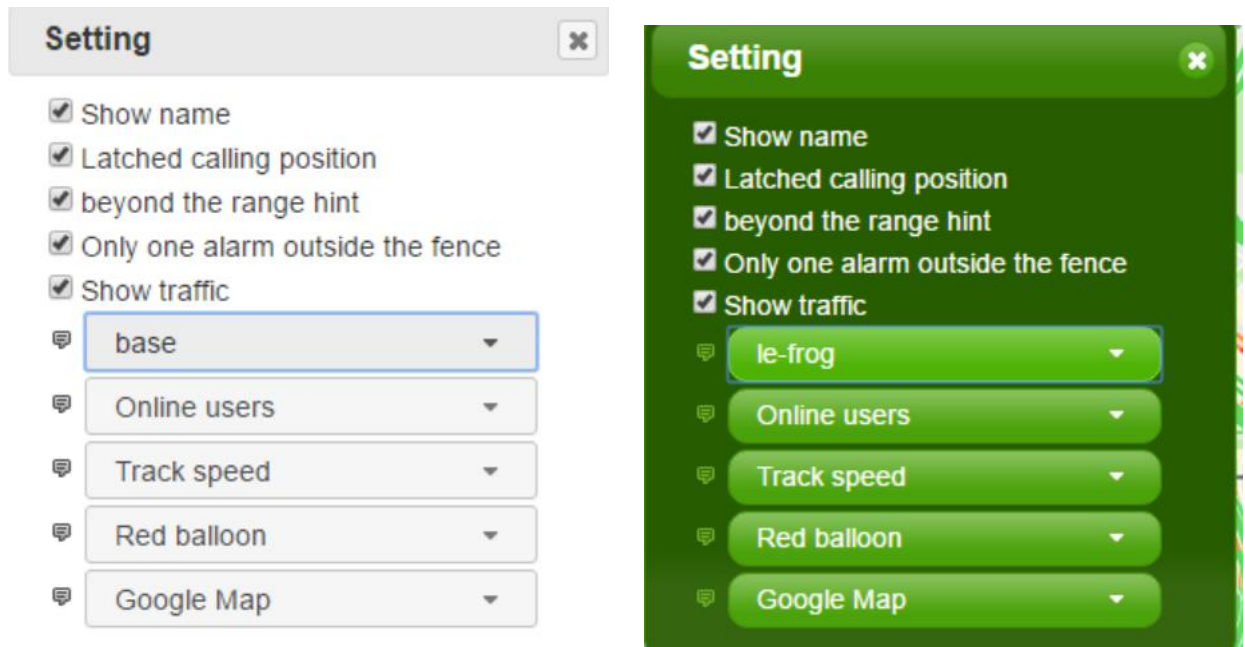
➢ **Show traffic**

It means you can show all of the world of the traffic, so you can tell your users which road is better.

➢ **Base**

Change the color of the interface after selection

➢ **Location**

Online user: Displays the location of the online user. When the online user has no real-time positioning, it is displayed at the last positioned position.

Fifth-minute real-time user: Displays users who have location information within fifth minutes of real-time. (For example, if user1 the last gps update is 3:15pm, but he is office right now, and right now time is 3:15pm, so it still can show user1 on the map, because before 3:15 pm during 15 mins, the user1 still have location, so that is why can show offline users of the real time.)

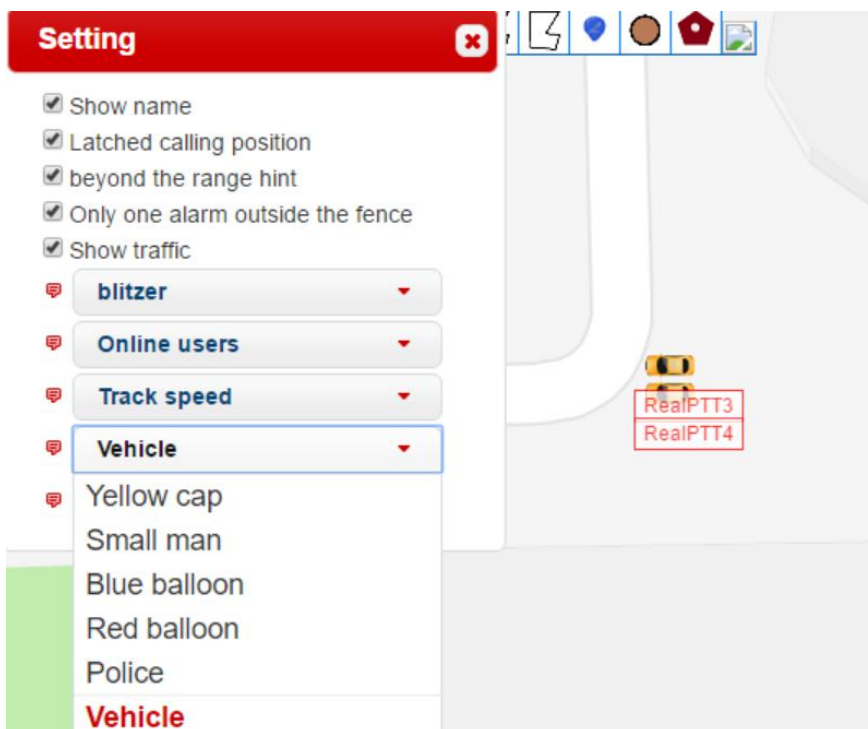All users: Displays information about the last location of all users.
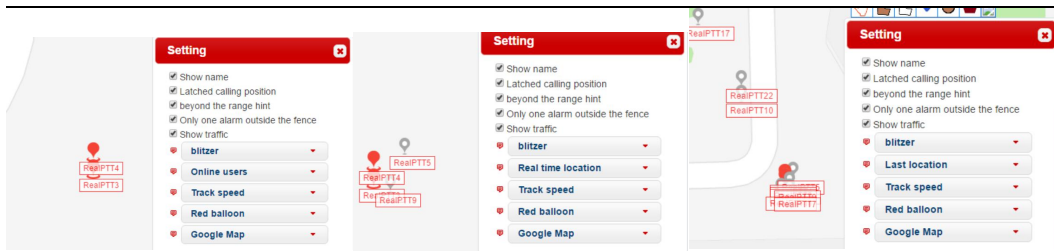
➢ Tracking Speed
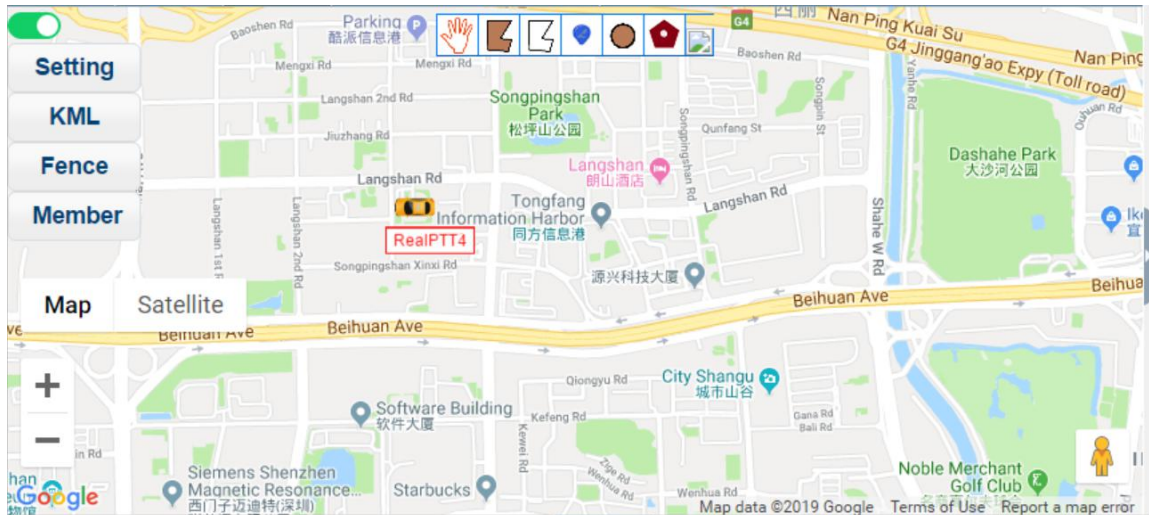
Set the playback speed of the user tracking.
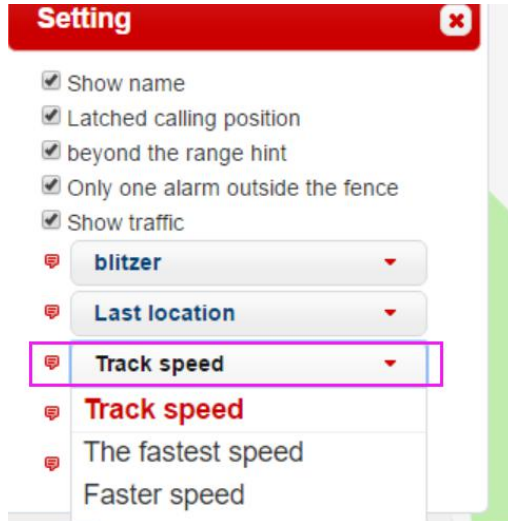
➢ User icon show on the map

The icon of the positioning is displayed (Yellow Cap, Small Man, Blue Balloon, Red Balloon, Police, Vehicle), select the corresponding icon, and the user displays the corresponding icon on the map interface.
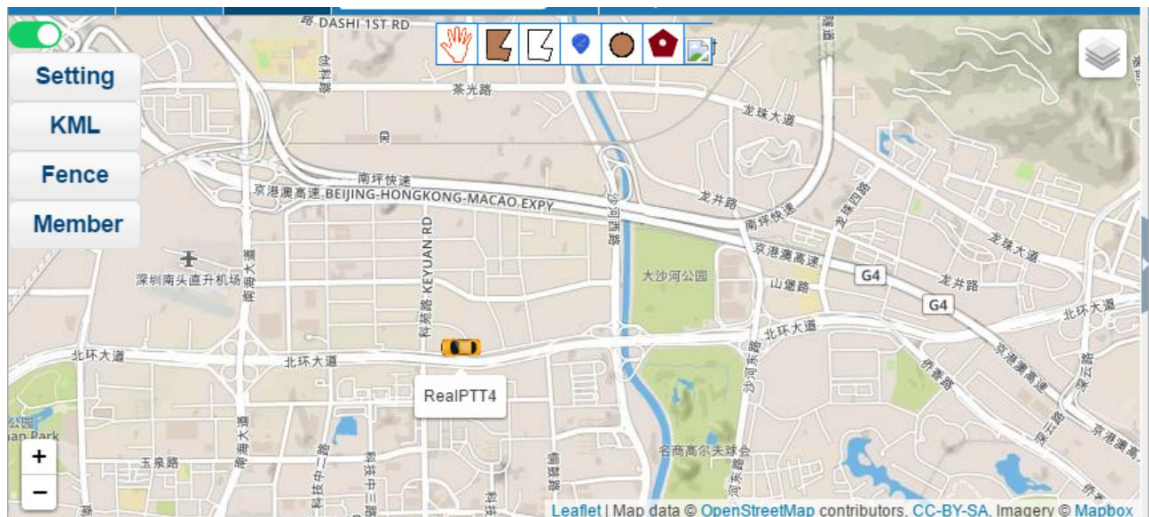

➢ Choose Map
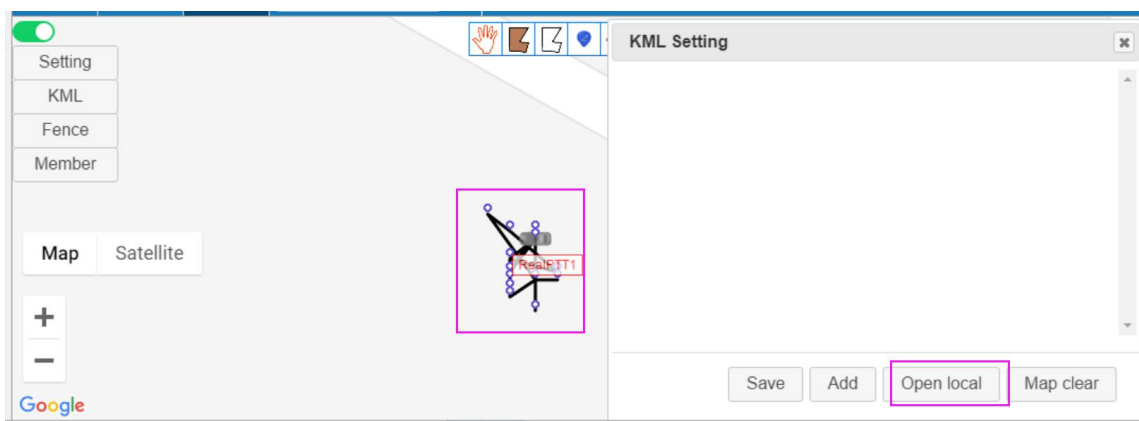
Right now we can support Google and Mapbox.

Google Map

Map Box

4.3.2 KML

KML file description: KML file is a kind of geographic information file created by Google company to describe and save track parameters such as time, place, latitude and longitude, altitude.
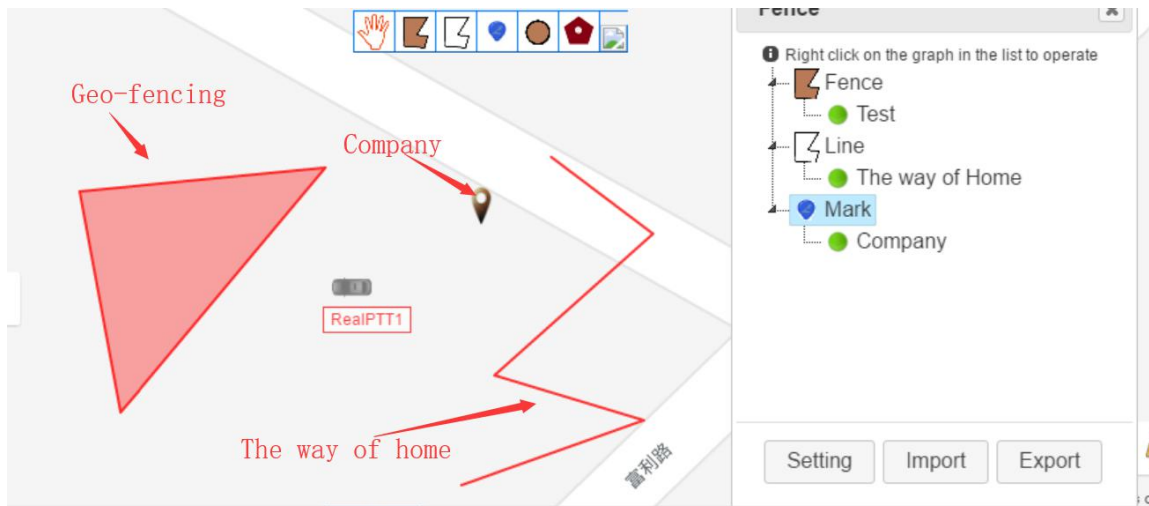

> ➢ Add: You can add the KML link.
> ➢ Open local: Select the local KML then import.

> ➢ Map Clear: Cleaner the KML link on the map.
>
> ➢ Save: Save KML link.
>
> ➢ Modify: Modify the current KML file.
>
> ➢ Show: You can show the KML route on the map.

4.3.3 Fence

When you click on the fence, information such as fences, lines, and markers added to the map will be displayed.

Fence

The following figure shows the alarm user settings for the electronic fence. By default, all users have alarms, and users who need to alarm can be customized.
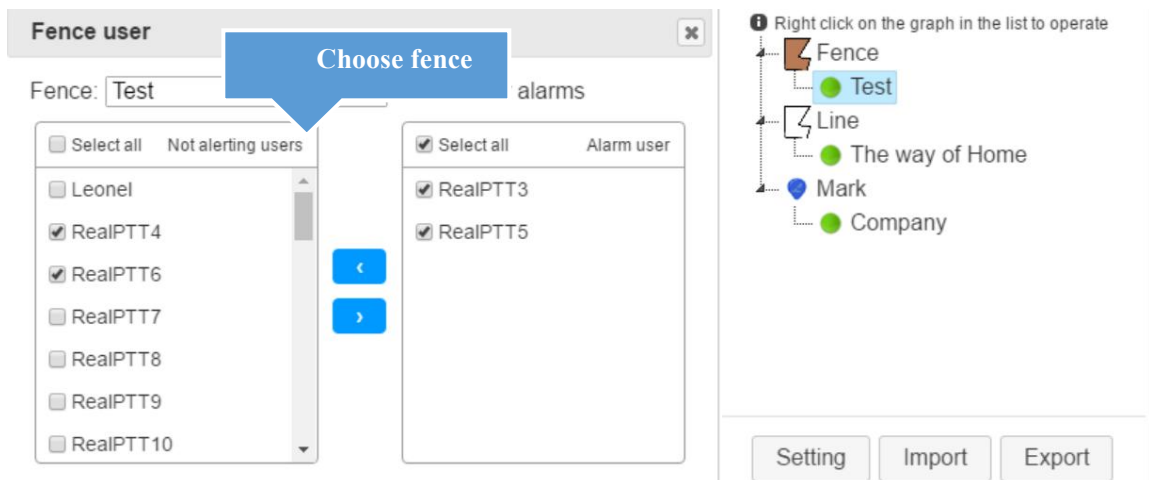
Export: Save the electronic fence file drawn on the map as a file on your local computer.

Import: The electronic fence file that guides you into the local computer and displays it on the map.

4.3.4 Member

Give each user a custom location icon for the map interface. Select the user

name on the right and click the icon on the left to set the corresponding icon for the user.
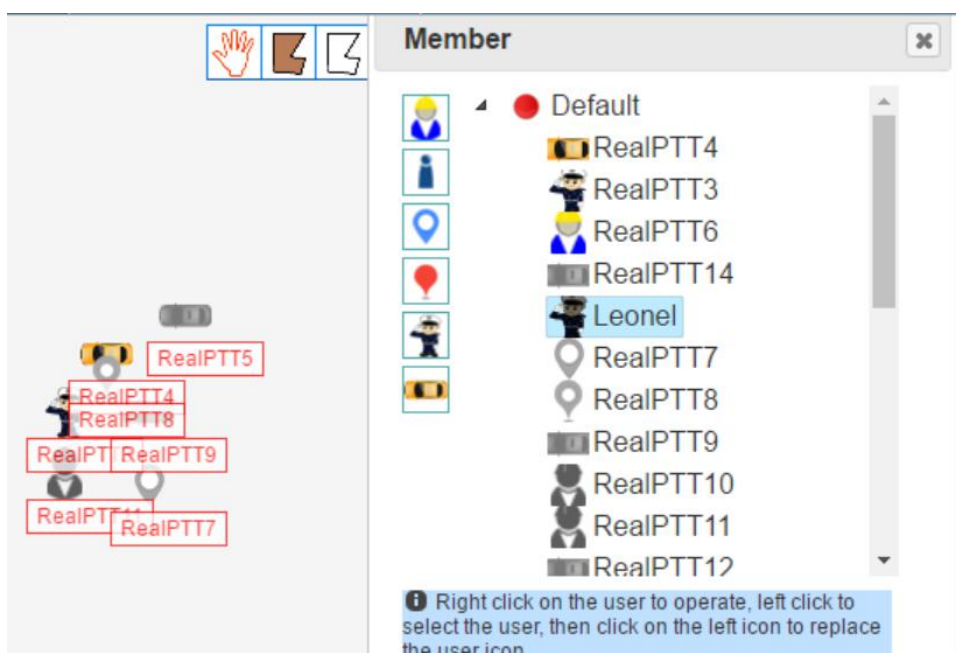

4.4 Information Area

4.4.1 GPS Information

Displays specific information about the user's location, including user name, user ID, speed, direction, altitude, status, positioning time, and latitude and longitude.

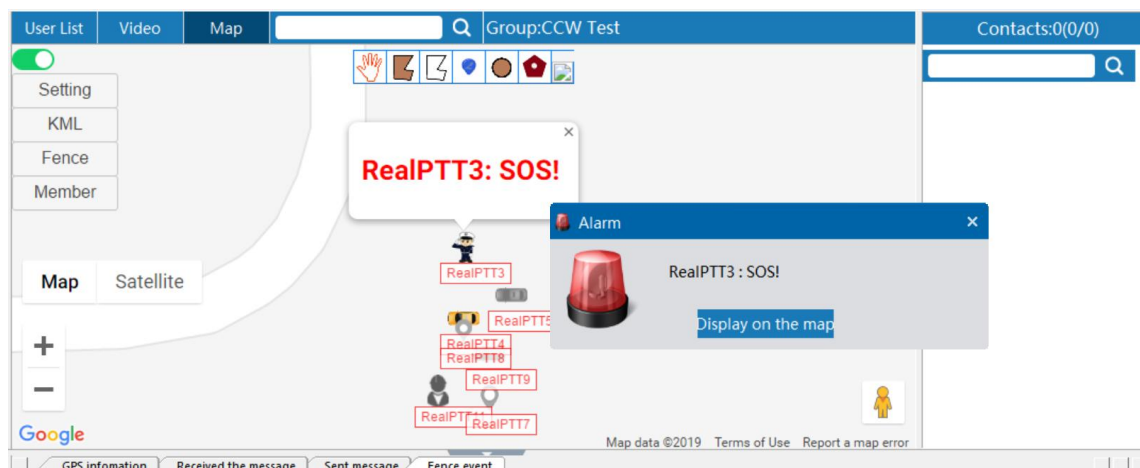| Name	ID	Speed	Direction	Elevation	Status	GPS time	Lat
RealPTT3	1114218	0.00km/h	North	0.00m	This Group	2019-03-22 17:01:42	22.556021
RealPTT4	1114219	0.00km/h	North	0.00m	This Group	2019-03-22 17:01:26	22.556000
RealPTT6	1114221	0.00km/h	North	0.00m	TETRA	2019-03-22 16:01:44	-33.508617
Dxnet3	1114245	0.00km/h	North	0.00m	Offline	2018-05-04 05:24:12	56.055389

4.4.2 Fence Event

Fence event is a record of a user entering and leaving an electronic fence after adding an electronic fence. The displayed content includes the user's ID, the user's name, the event (inward or out), the fence (the name of the electronic fence), the positioning time, the longitude, and the latitude.

ID	Name	Event	Fence	GPS time	Lat	Lng
1114219	RealPTT4	Out		2019-03-22 16:54:01	22.556000	113.942932
1114218	RealPTT3	Out		2019-03-22 16:53:41	22.555990	113.942924
1114219	RealPTT4	Out		2019-03-22 16:53:26	22.556000	113.942932
1114221	RealPTT6	Out		2019-03-22 15:54:48	-33.508617	-70.708267
1114218	RealPTT3	Out		2019-03-22 16:53:11	22.555990	113.942924

4.5 SOS

When the end user encounters a danger to issue an SOS distress signal, the dispatcher will receive the user's distress signal and display the user's location on the map interface. The record of sos alarm information can be viewed in the

received information.

SOS Alarm