



**PC USER GUIDE**



**PC Client User Manual**  
Version 7.03  
2025

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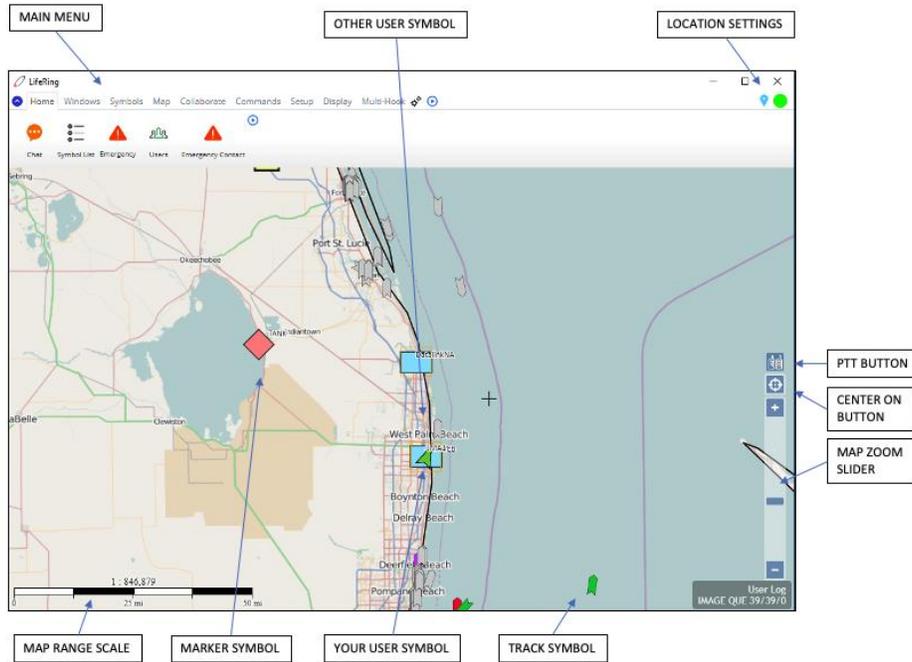
## 1 INTRODUCTION

LifeRing is a breakthrough in group collaboration for government, military, security, and first responders. LifeRing software is designed to run on commercial, off the shelf Android, iOS, and Windows devices.

The PC LifeRing adaptation is designed for environments such as a fixed command center or vehicle command center and can also be deployed on a Windows Tablet or Toughbook.



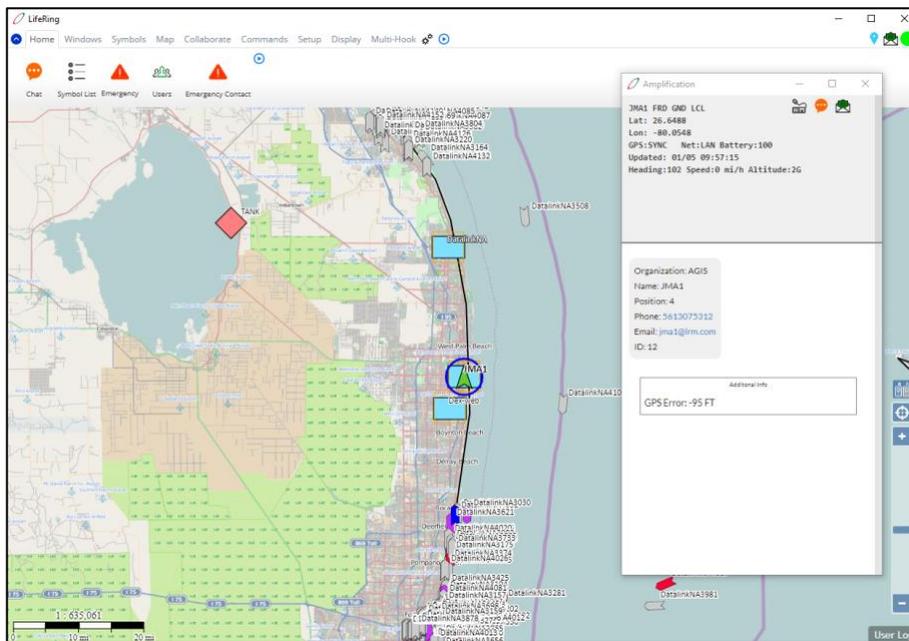




At this point, the map area will be limited. A User can zoom in or out in the main map view by selecting the plus (+) or (-) shortcut button.

### 1.3 Hook Readout

When LifeRing User's symbol is selected, the LifeRing Hook Readout will open and then you can move the hook readout window anywhere on the screen for your convenience.



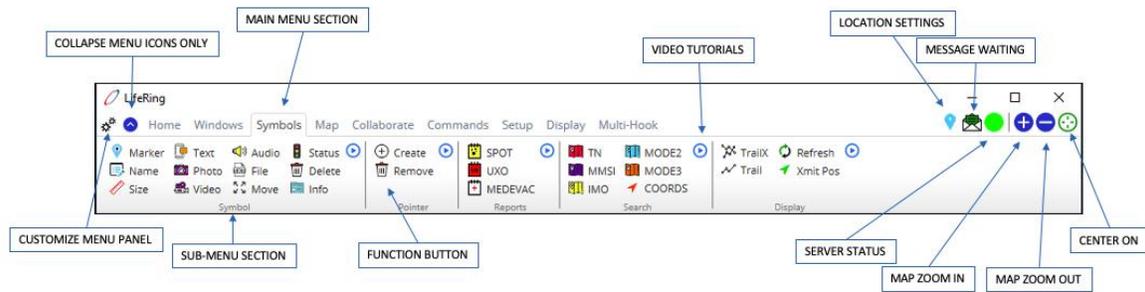
**The Hook Readout displays:**

- The Users call sign / MILSTAND 2525 designation
- Latitude
- Longitude
- Device GPS Status / Connection Type
- Device Battery strength
- The last time it reported movement
- Heading / Speed / Altitude
- Range and Bearing from you
- User Profile Data

To close the HOOK READOUT, you must deselect the LifeRing User by either selecting the symbol again or clicking on the map.

## 2 LIFERING MAIN MENU

The PC Main Menu is located along the top of LifeRing's map and broken down into nine sections. Selecting a tab from the Main Menu will provide a submenu directly beneath the tab.



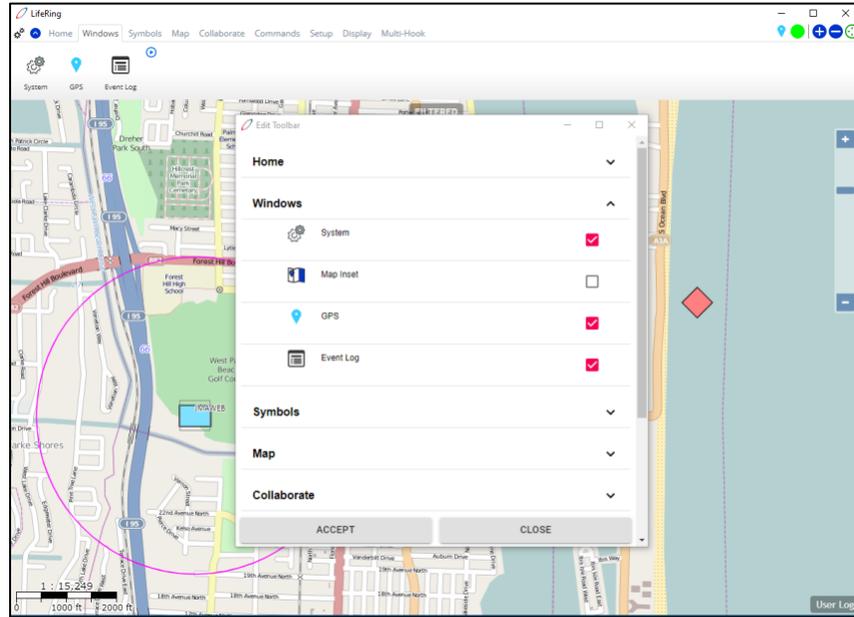
The blue arrow to the left of the Home option allows the user to collapse the menu into a compact form or increase its size for more details.



The LifeRing Main Menu consists of nine sections:

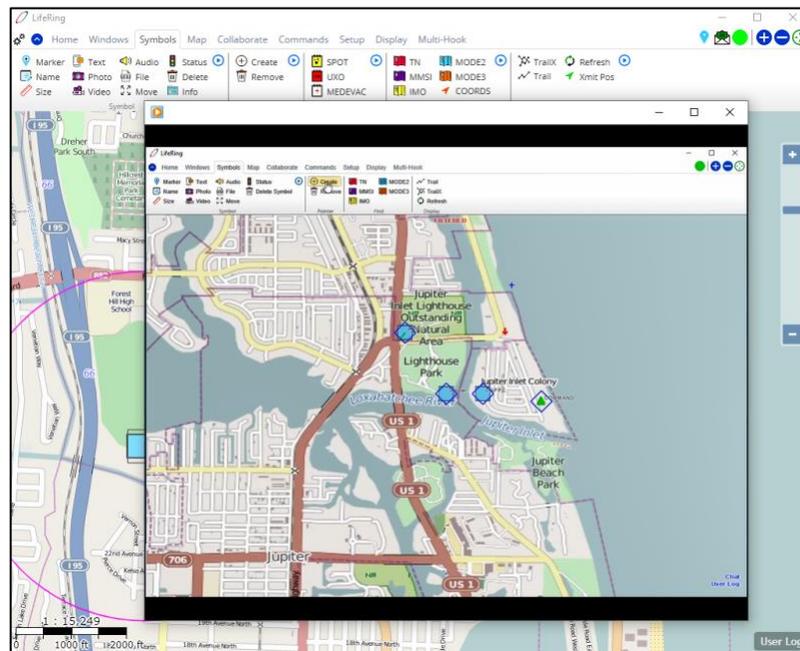
- Home (Section 3)
- Windows (Section 4)
- Symbols (Section 5)
- Maps (Section 6)
- Collaborate (Section 7)
- Commands (Section 8)
- Setup (Section 9)
- Display (Section 10)
- Multi-Hook (Section 11)

The Gear icon on the far left of the menu opens up a panel where you can select which menu options you want to display.



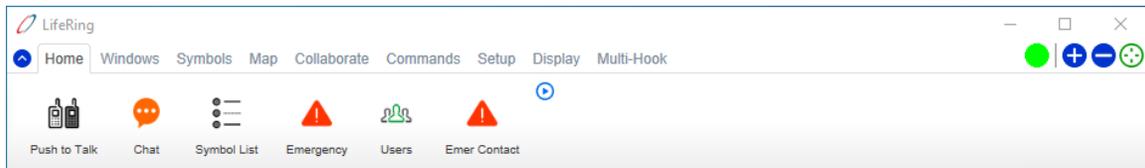
Simply toggle on/off the menu items and hit accept to save the changes.

The small blue Video Player icons to the right of each section open a brief tutorial about that section.



## 3 HOME SECTION

The Home section is where most of the communications take place. The features in this section include Push-To-Talk, Chat, Symbol List, Emergency, Users and Emergency Contact.



### 3.1 Push To Talk (PTT) Group

LifeRing PTT uses Internet Protocol (IP) to exchange voice communications. LifeRing PTT converts sounds into digital data that is transmitted over IP channels and then they are translated back to sounds on the receiving LifeRing device. LifeRing Users that have PTT enabled are indicated by a blue diamond shape surrounding their symbol. If a LifeRing User does not have the blue diamond around their symbol, they do not have access to PTT.



To use PTT:

- Click and hold the Push To Talk icon.
- Speak into the microphone.
- At the end of your message, release the Push To Talk icon to listen to any responses.

Sufficient bandwidth is required to support LifeRing PTT. If a device does not have enough bandwidth, such as a device using Iridium, PTT will not work. However the users symbol will still indicate that PTT is enabled.

Under Set Up >> PTT Log you can access the PTT transmission Log Status.

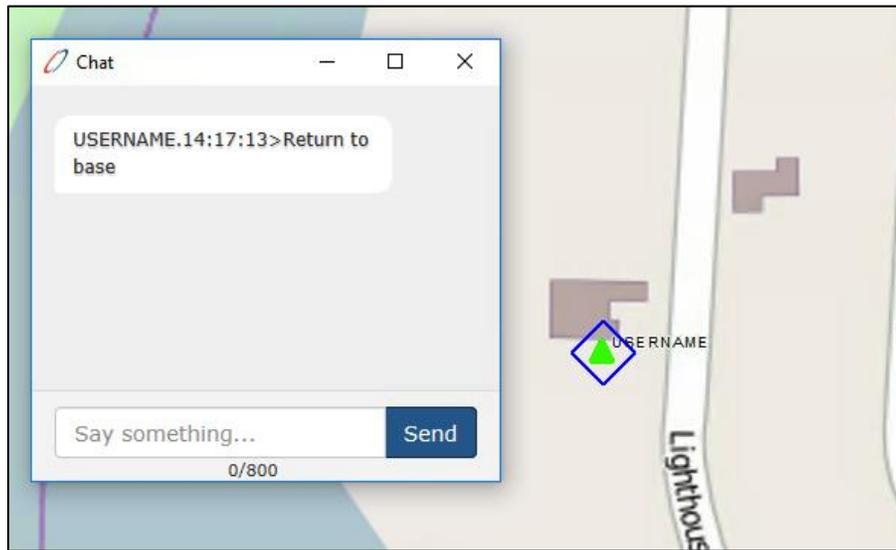
### 3.2 Push to Talk (PTT) Hooked User

To use PTT:

- Hook the User you want to talk to
- Click and hold the Push To Talk icon.
- Speak into the microphone.
- At the end of your message, release the Push To Talk icon to any responses.

### 3.3 Chat

The Chat function enables LifeRing Users to exchange real time Chat messages. Chat messages are sent to and received from everyone in your active group. This is like a real time instant messenger meant for quick, mass communications.



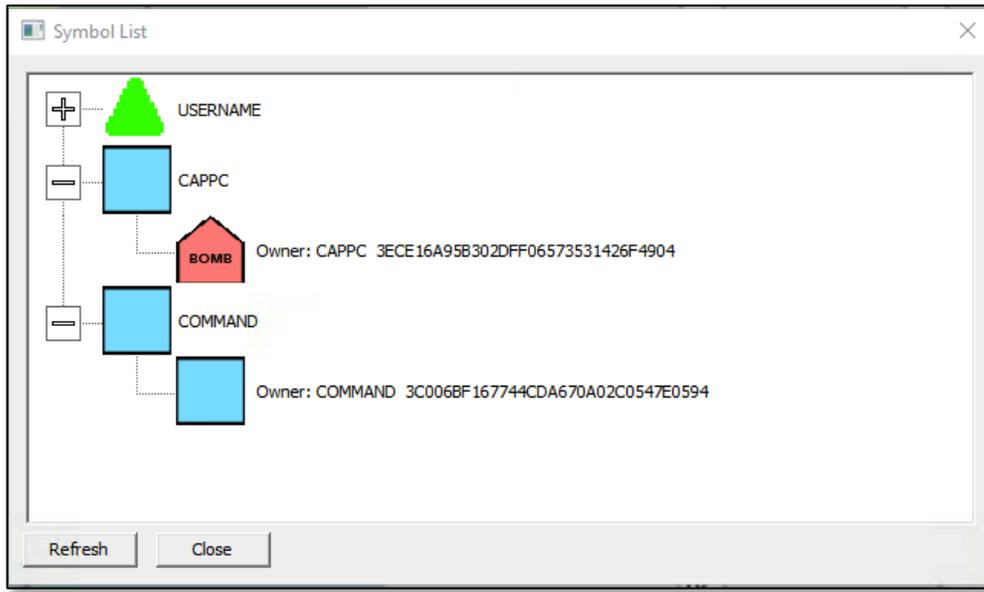
To begin a Chat:

- Select the Chat button found under Main Menu>Home.
- Type the message that you wish to communicate and select the SEND button. LifeRing User generated outgoing messages are displayed in GREEN and incoming messages will be displayed in WHITE.
- An audio alert is sent to all LifeRing Users so they can open their CHAT windows and respond.
- The ALERT button sends an audible chime alert to all those in the network. If a CHAT message has been sent and the User feels it has been unnoticed, they can send an additional ALERT sound to Users, notifying them that they have an unread CHAT message.
- To close the CHAT window, select the QUIT button. You will still be alerted when you receive CHAT messages.

### 3.4 Symbol List

The Symbol List gives the LifeRing User quick access to find who created Markers on the map. It also allows the User to quickly and easily find them on the map. The Symbol List is found under Home > Main Menu tab.

Select the Symbol List button to open the list. Selecting a Marker from the list will automatically center the map on it. This is a fast and efficient way to find where a Marker is located.

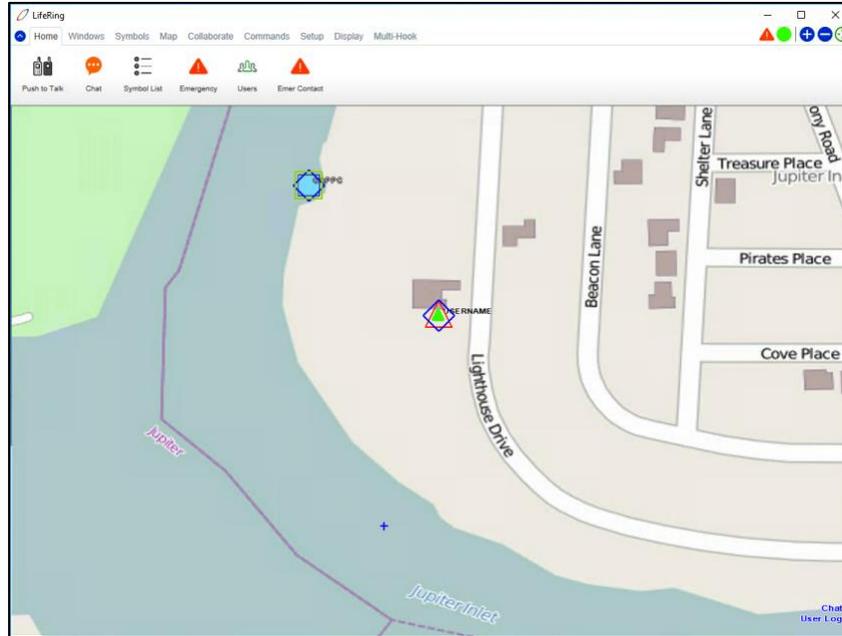


### 3.5 Emergency

One of LifeRing's most compelling features is the ability to declare an Emergency that immediately alerts all Users on the network. Once alerted of an Emergency, Users can respond in a variety of ways. They can attempt to communicate with the User in Emergency through PTT, CHAT, Messages or any other LifeRing communication. Declaring an Emergency will cause a red triangle to surround the Users symbol on the Main Map for all Users to see. Users in the same group will have their map automatically center on the location of the User in Emergency. Users will also receive an audible alert that an Emergency has been declared. At this point, everyone knows where the User who declared the Emergency is located and can travel there. A User can not declare emergencies for other Users.

To declare an Emergency:

- Select the "Home" tab option
- Select "Emergency"



To cancel an Emergency, deselect the Emergency button. Only the LifeRing unit that has sent an Emergency can cancel it. Users in Emergency display their name in red on all of the Users lists (see Users section for more on the Users List).

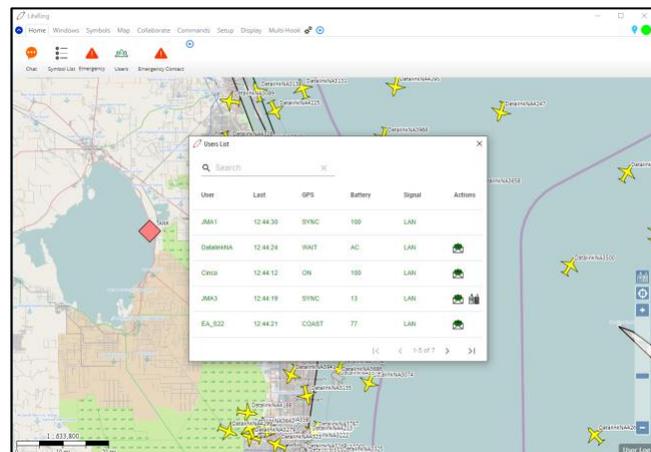
### 3.6 Users

The Users list enables the PC User to rapidly focus on and direct data flow to any current Users or User.

Selecting the Users button will open a list of the current Users on your LifeRing network, in a pop up window. The window can be moved anywhere on your screen by dragging and dropping.

It displays:

- Search field
- The User name
- The last time the User's device reported
- Indication of GPS accuracy
- Device's battery level
- Device's signal strength
- One-click messaging to that user
- One-click PTT to that user



Each column header can be selected to sort the list in ascending or descending order depending on the column criteria.

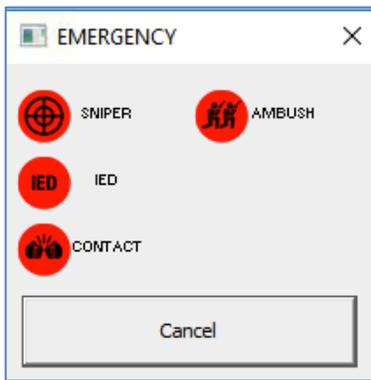
Clicking on a User's name in the User list automatically selects that unit's symbol on the Main Map. This enables the LifeRing Operator to easily locate the Users location and contact the active User without having to locate their symbol on the Main Map.

As soon as a User's symbol is selected from the list the map will center on the selected symbol and the Hook Readout will appear.

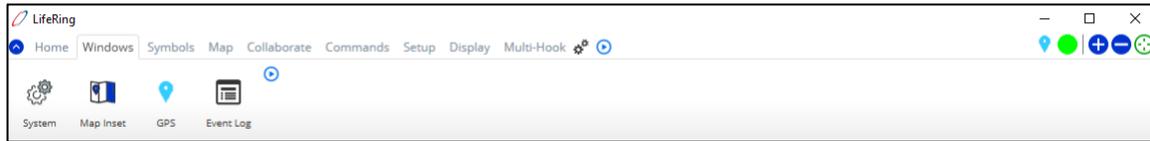
Any LifeRing Users that declare an Emergency will be displayed in red. The Users list automatically updates as Users join the network.

### 3.7 Emergency Contact

This option lets you issue a content-specific Emergency at a location on the map. Click a point on the map and then click the Emergency Contact menu icon. Select the nature of the Emergency: Sniper, IED, Contact or Ambush and it will add an Emergency symbol to the map as well as send the alert to all other users.



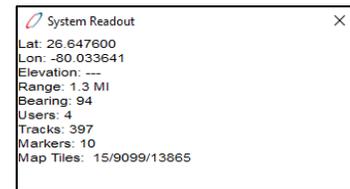
## 4 WINDOWS



### 4.1 System (System Readout)

The System Readout box can be opened by selecting the System button from the Windows menu.

LifeRing depends on the LifeRing network Server to exchange data with other LifeRing Users. If there is not a green circle in the task bar, then there is no communication with the Server. This means no one is receiving your data until you see the green circle again



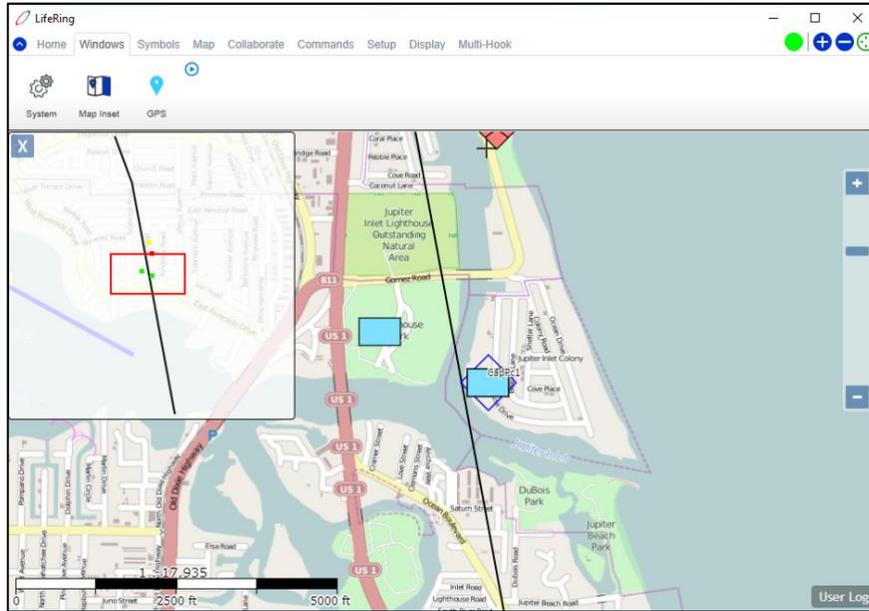
System Readout window displays:

- The Local Call Sign
- Number of User Symbols/ Number of Markers
- Number of Messages in the Message Cache
- Range and Bearing from the selected symbol to the Mouse Cursor (If no symbol is selected, Range and Bearing from the Local Symbol to the Mouse Cursor)
- Local Symbol Position
- Map Scale

### 4.2 Map Inset

The purpose of the LifeRing Mini Map Area (Map Inset) is to alert the LifeRing User of the existence of LifeRing symbols whose geographic location is outside of the zoom level of the Main Map area. Without the benefit of the Mini Map, LifeRing Users would be unaware of symbols outside the perimeter of the Main Map.

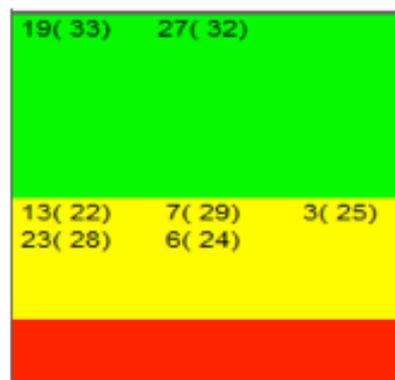
Unlike the Main Map area that remains at a prescribed zoom level, the mini map expands and contracts to accommodate symbols as they join leave or move within the LifeRing Common Operational Picture.



Windows LifeRing Users can use the LifeRing Mini Map to focus on other symbols. Click in the Mini Map Area and observe that the Main Map automatically relocates to that location. Any place you tap in the Mini Map Area causes the Main Map to reposition to that location.

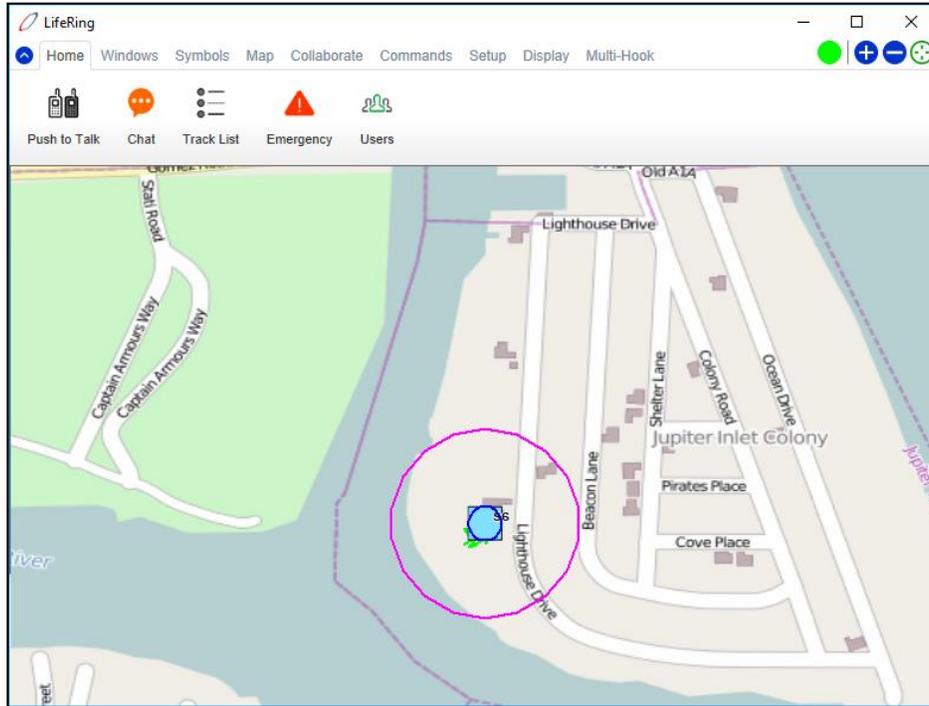
### 4.3 GPS

The GPS button displays a graphic illustration to rate the number and signal strength of the satellites.



**Green = excellent**  
**Yellow = fair**  
**Red = poor**

When a User's GPS is down, the name above their symbol will flash.



The pink circle shows the vicinity where the user may actually be located based on the accuracy of the GPS.

#### 4.4 Loss of Communications and Alerts

LifeRing is constantly monitoring IP connectivity to alert the User of the possibility that data is not being exchanged between the LifeRing User device and the LifeRing Network Server. LifeRing has several alerts to indicate loss of connectivity.

-  = Connected to Server
-  = Found server and attempting to connect
-  = Cannot reach a server at the current IP or URL that it is using.
-  = License Failure or in Playback Mode

The second alert is a flashing symbol. If one LifeRing User has not received data from another User after two reporting intervals, the symbol of the User that has not reported will go LOST. This means that the symbol will begin to flash at its last reported location. This LOST symbol will continue to flash until one of two things happen:

The Lost User reports its position.

Five minutes passes. After five minutes, the symbol of the LOST User is dropped. In this case, as soon as the dropped User reports its position, the symbol is displayed at its correct location.

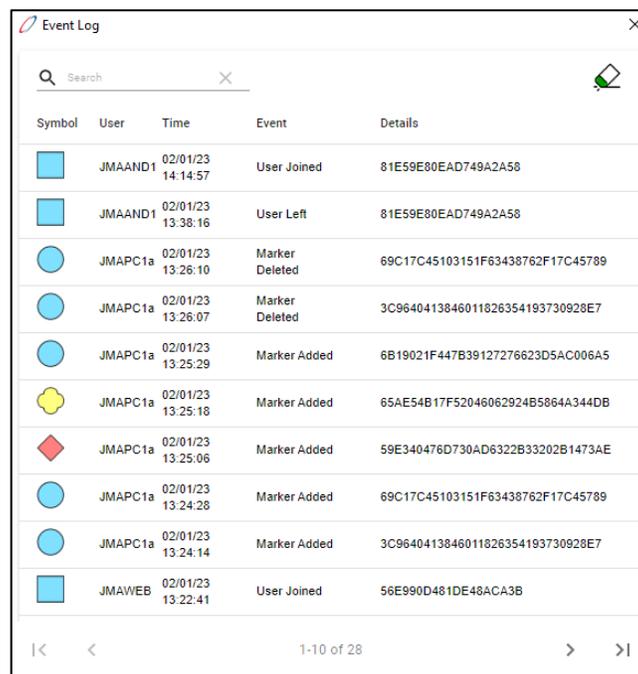
Three satellites are required to determine your position. Four satellites are required for altitude. When the Main Map is enlarged, you can press the letter “G” on the keyboard key to display the actual GPS data.

## 4.5 EVENT LOG

Displays all Symbols added during active session.

This display the symbol ICON. The USER that added it. The TIME it was added. The TYPE of symbol and the GUID of the symbol.

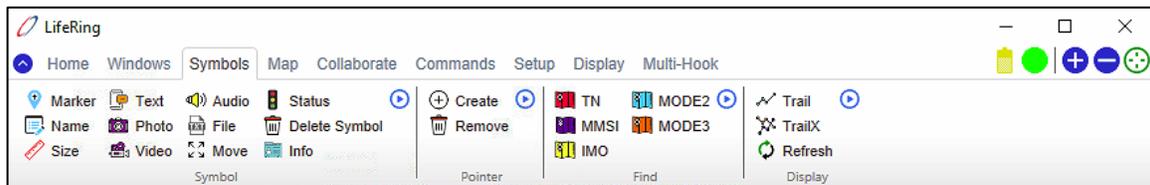
You can sort the columns by clicking on USER, TITLE, EVENT or DETAILS. You can refresh the list by clicking the eraser icon in the top right of the window.



Symbol	User	Time	Event	Details
	JMAAND1	02/01/23 14:14:57	User Joined	81E59E80EAD749A2A58
	JMAAND1	02/01/23 13:38:16	User Left	81E59E80EAD749A2A58
	JMAPC1a	02/01/23 13:26:10	Marker Deleted	69C17C45103151F63438762F17C45789
	JMAPC1a	02/01/23 13:26:07	Marker Deleted	3C9640413846011826354193730928E7
	JMAPC1a	02/01/23 13:25:29	Marker Added	6B19021F447B39127276623D5AC006A5
	JMAPC1a	02/01/23 13:25:18	Marker Added	65AE54B17F52046062924B5864A344DB
	JMAPC1a	02/01/23 13:25:06	Marker Added	59E340476D730AD6322B33202B1473AE
	JMAPC1a	02/01/23 13:24:28	Marker Added	69C17C45103151F63438762F17C45789
	JMAPC1a	02/01/23 13:24:14	Marker Added	3C9640413846011826354193730928E7
	JMAWEB	02/01/23 13:22:41	User Joined	56E990D481DE48ACA3B

## 5 SYMBOLS

Symbols can be placed on the map to represent Users or Points of Interest. Symbols on the map can have names, location, text, photo, and video information attached to them.

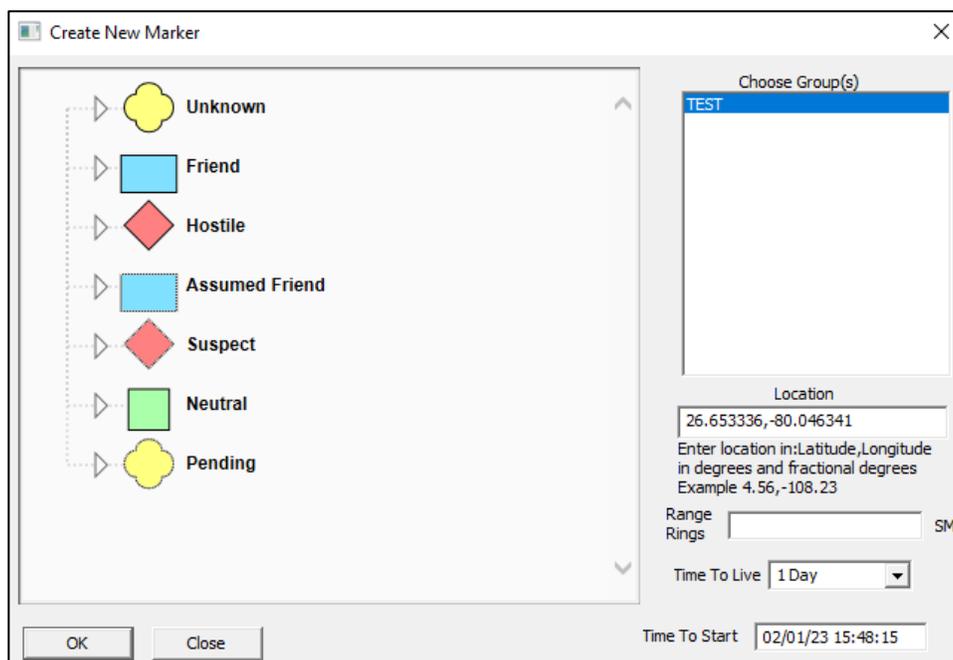


### 5.1 Marker (Create Marker Symbol)

To add a Marker Symbol to the map:

- Click on the location you want it to display
- This will place a blue cross hair on the map
- Right click on that spot with your mouse or click the Marker button in the Symbol menu.
- Choose the symbol you want to use.
- Choose the Group(s) you in which you want it to be displayed.
- Manually modify the coordinates if needed.
- Choose up to (3) Range Rings to display around the Symbol
- Choose a Time To Live for how long you want it to display.
- Choose a Time To Start for when you want it to display.
- Click OK.

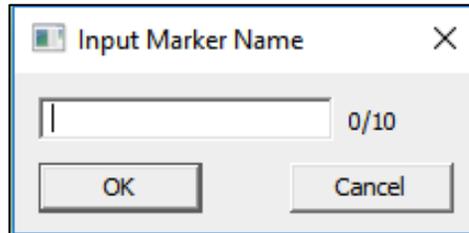
The marker symbol will now display on the map.



## 5.2 Add a Name to a Marker

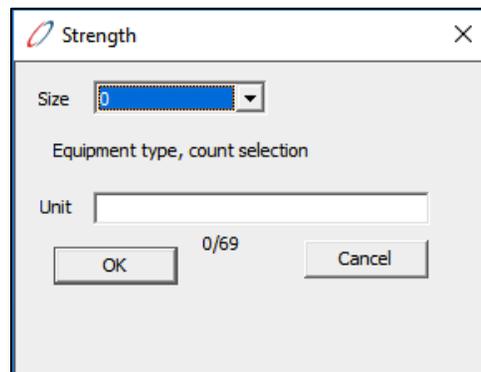
- Select the desired Marker/Symbol you want to name.
- Select Name from the Symbol Menu at the top of the screen.
- When the input box appears, type in the desired name and then click on OK when finished.

All the devices on the Network will see the Marker/Symbol with its name directly above the symbol on map.



## 5.3 Add Size to a Marker

Size allows the user to set the unit strength that a given symbol on the map represents.



For a generic marker symbol, the size dropdown will give you the options: 1-12, Few, Many or >12. If the marker symbol represents a person or unit, then the size dropdown will give you the options for each echelon level: Team, Squad, Section, Platoon, Company, Battalion, Regiment, Brigade, Division, Corps, Army, Front, Region.

## 5.4 Add Unit to a Marker

The Unit field is used to populate the Order of Battle Organization Display under. Type in the Chain of Command hierarchy associated for the Marker Symbol from it's echelon and then enter any/ commanding units going up the chain of command with each separated by forward slashes "/". For example, if the Marker Symbol represents 3rd Platoon then you would type in:

*3rdplatoon/3rdcompany/3rdbattalion/3rdregiment/3rdbrigade/etc...*

## 5.5 Add Text to a Marker

The Text feature enables the LifeRing User to provide additional text based information about a marker or your own symbol. Multiple people can add multiple text attachments to a symbol, even if they did not create the symbol.

To add text to a Marker/Symbol:

- Hook the desired symbol
- Select TEXT from the SYMBOL Submenu
- Type the desired text in the textbox
- Select OK

## 5.6 Attach a Photo to a Marker

The Photo feature enables the LifeRing User to provide additional photographic information about a marker or your own symbol. Multiple people can add multiple attachments to a symbol, even if they did not create the symbol.

To add a photo to a marker:

- Hook the desired symbol
- Select Photo from the Symbol Submenu
- In the “SELECT DB PHOTO” window that appears, click “Select File”
- In the Windows File Explorer window that appears double click on the photo to attach.
- You will now see a preview of the photo appear in the box on the left of the Window.
- If satisfied with the photo, click the “ATTACH” button.
- If the marker is still hooked on the map, the “DB Readout” window will appear with the on screen after the server receives the photo.



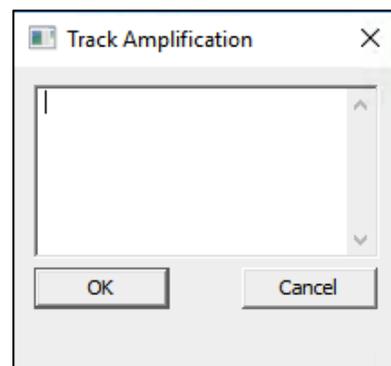
## 5.7 Attach Video to a Marker

The Video feature enables the LifeRing User to provide additional pre-recorded video clips about a marker or your own symbol. Multiple people can add multiple attachments to a symbol, even if they did not create the symbol.

To add a video message to a marker:

- Hook the desired symbol
- Select Video from the Symbol Submenu
- In the “SELECT DB AUDIO” window that appears, click “Select File”
- In the Windows File Explorer window that appears double click on the audio file to attach.
- You will now see a preview of the photo appear in the box on the left of the Window.
- Click the “ATTACH” button in “SELECT DB AUDIO” window.

If the marker is still hooked on the map, the “DB Readout” window will appear with the on screen after the server receives the video clip.



## 5.8 Attach Audio to a Marker

The Audio feature enables the LifeRing User to provide additional pre-recorded audio information about a marker or your own symbol. Multiple people can add multiple attachments to a symbol, even if they did not create the symbol.

To add an audio message to a marker:

- Hook the desired symbol
- Select Audio from the Symbol Submenu
- In the “SELECT DB AUDIO” window that appears, click “Select File”
- In the Windows File Explorer window that appears double click on the audio file to attach.
- You will now see a preview of the photo appear in the box on the left of the Window.
- Click the “ATTACH” button in “SELECT DB AUDIO” window.

If the marker is still hooked on the map, the “DB Readout” window will appear with the on screen after the server receives the audio clip.

## 5.9 Attach a File to a Marker

The File feature enables the LifeRing User to attach a file to a marker or your own symbol. Multiple people can add multiple attachments to a symbol, even if they did not create the symbol.

To add a File message to a marker:

- Hook the desired symbol
- Select Video from the Symbol Submenu
- In the “SELECT DB FILE” window that appears, click “Select File”
- In the Windows File Explorer window that appears double click on the audio file to attach.
- You will now see a preview of the photo appear in the box on the left of the Window.
- Click the “ATTACH” button in “SELECT DB FILE” window.

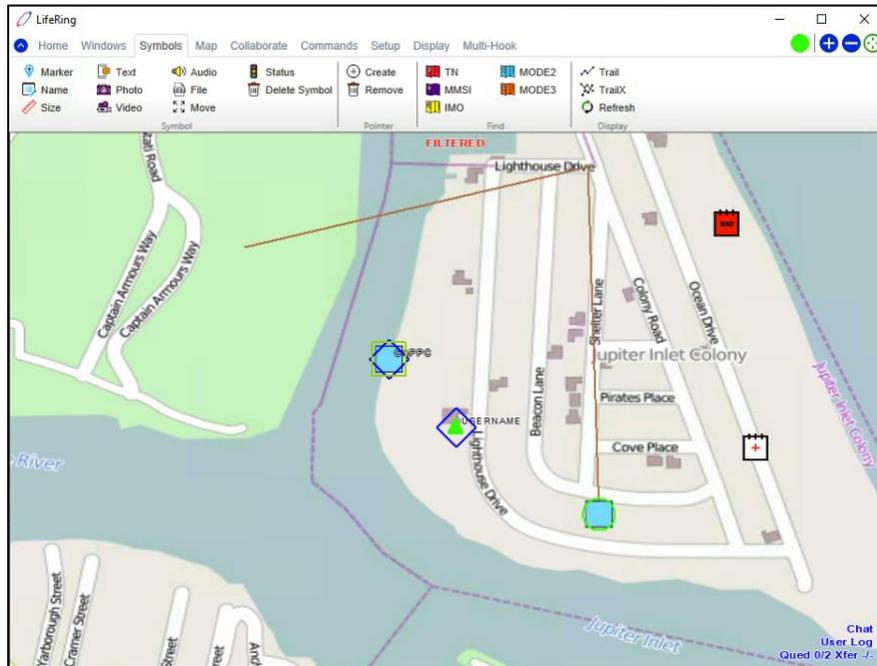
If the marker is still hooked on the map, the “DB Readout” window will appear with the on screen after the server receives the file.

## 5.10 Move a Marker

The MOVE button enables the LifeRing User who has created a Marker/Symbol to manually update its position. LifeRing Users can also relocate their own Marker/Symbol if GPS data is not available on their PC.

To activate the MOVE function, you must first hook the Marker/Symbol. Then select MOVE. Find the location on the map to update the Marker/Symbol’s position and touch the map display at the new location.

The objects Marker/Symbol will automatically adjust its position to the new cursor location on the Main Map.

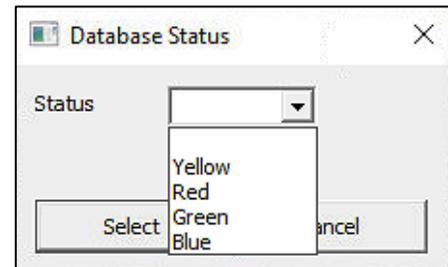


### 5.11 Attach a Status to a Marker

The Status feature enables the LifeRing User to assign a Status to a Marker Symbol

To add a Status to a marker:

- Hook the desired symbol
- Select Status from the Symbol Submenu
- Use the Pull Down menu to choose the Status
- Click the "Select" button.



### 5.13 Delete a Marker

To delete a Marker/Symbol on the map:

- Hook (select) the symbol you want to delete
- Select Delete Symbol from the menu.

If the Marker/Symbol you are deleting is not one that you created, you will get a pop up asking if you really want to delete this Marker/Symbol. If you select "YES" the Marker/Symbol will be deleted from all devices on the network.

## 5.12 Attach Info to a Marker

The Info feature enables the LifeRing User to attach some Profile data to a Marker

To attach a Info to a Marker:

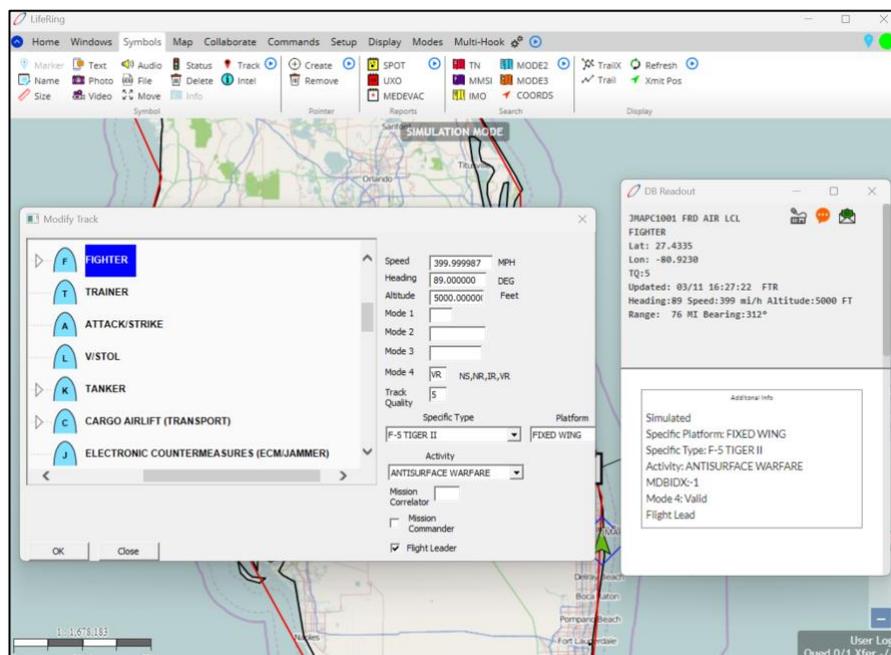
- Hook the desired symbol
- Select Info from the Symbol Submenu
- Type in the fields in the Info window.
- Click the “OK” button.

## 5.13 Add a Track

To simulate track data, you can add a Track to the system in the same manner you add a Marker. Note: You must be enabled for Simulator Mode to use this feature.

- Click on the location you want it to display
- This will place a blue cross hair on the map
- Click the Track button in the Symbol menu.
- Choose the symbol you want to use.
- Enter the Speed, Heading and Altitude
- Enter a Mode value and Track Quality (optional)
- Choose a Specific Type
- Choose a Platform
- Choose an Activity
- Enter a value for Mission Correlator and check Mission Commander or Flight Leader (Optional)
- Click OK.

The marker symbol will now display on the map with the values displayed in the hook readout.

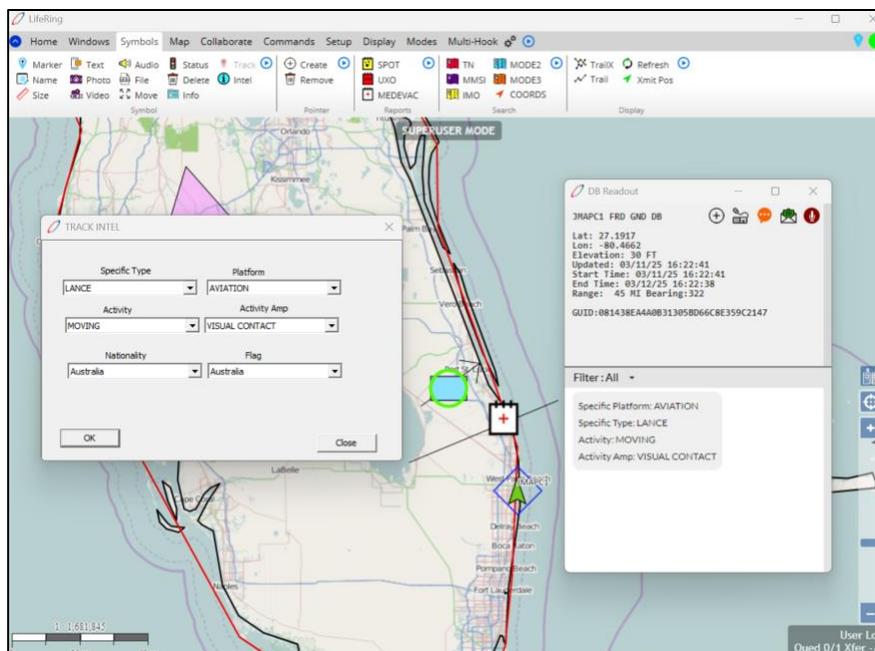


## 5.14 Attach Intel to a Marker

The Info feature enables the LifeRing User to attach some Profile data to a Marker  
To attach a Info to a Marker:

- Hook the desired symbol
- Select Intel from the Symbol Submenu
- Choose a Specific Type
- Choose an Activity
- Choose a Nationality
- Choose a Platform
- Choose an Activity Amp
- Choose a Flag
- Click the “OK” button

The marker symbol will now display the values in the hook readout.



## 5.14 Pointer

The Command center may have a specific location of interest that they need to point out to the Users in the field. The pointer is a great feature to use for this purpose.

To add a Pointer on the map:

- Place a cross hairs on the map at the desired location
- Click the Symbol > Pointer > Create button
- A red point symbol will be displayed.

All other Users will see a line from their User symbol to the point you created.  
Another User created a Pointer on their PC to show you how this looks.



To delete a pointer:

- Select Remove from the Pointer Sub-Section

## 5.14 REPORTS

Reports are content-specific symbols added to the map that provide a concise narrative report of essential information covering events or conditions. The options are SPOT Report, UXO (Unexploded Ordinance) Report and MEDEVAC Report.

Report MEDEVAC

Freq or Net:

Urgent:

Urgent Surgical:

Type: Priority:

Routine:

Convenience:

Special Equipment:

Type: # Litter:

# Ambulatory:

Pickup Site Secure:

Pickup Method:

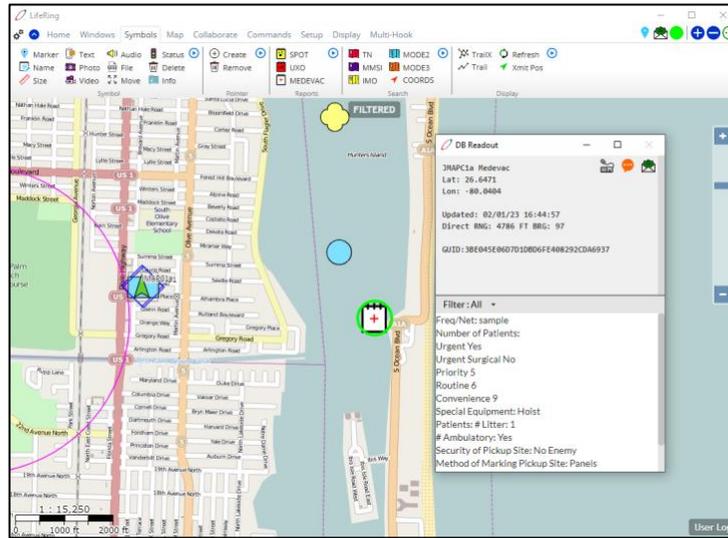
Choose Group(s): TEST

To add a Report on the map:

- Place a cross hairs on the map at the desired location
- Click the Symbol > Reports > Choose Report Type

- Fill out any/all relevant fields
- Choose the Group(s) you want to see the Report Symbol
- Click OK
- The Report Symbol will be displayed.

All users in your groups can now Hook the Report Symbol and see the Report data.



## 5.15 FIND

The FIND features are another way to locate objects and view their location or information.

### 5.14.1 TN

Track Number

### 5.14.2 MMSI

Maritime Mobile Service Identity (MMSI) is a series of nine digits which are sent in digital form over radio frequency channel in order to uniquely identify ship's stations, ship earth stations, coast station's, coast earth stations, and group calls.

### 5.14.3 IMO

Ship Identification Number consisting of three letters "IMO" followed by a unique seven-digit number assigned to sea-going merchant ships under the International Convention for Safety of Life at Sea (SOLAS).

### 5.14.4 MODE2

Provides 4-digit octal unit code (set on ground for fighters, can be changed in flight by transport aircraft)

### 5.14.5 MODE3

Provides a 4-digit octal identification code for the aircraft, set in the cockpit but assigned by the air traffic controller. Mode 3/A is often combined with Mode C to provide altitude information as well.

### 5.14.1 COORDS

This enables you to manually enter a Latitude and Longitude and generate a pointer on the map at the precise location with the coordinates displayed.



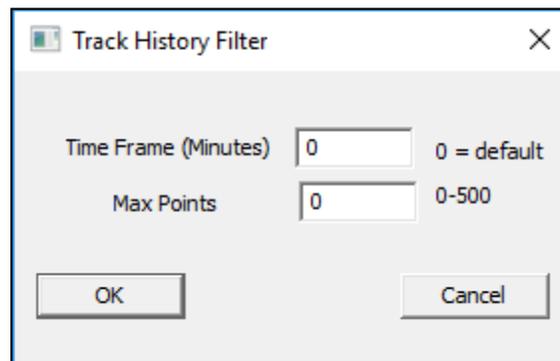
## 5.15 Trail (Movement History Trail)

When a symbol moves on the map it will create a color trail of where it has been. The trail can be viewed by hooking the desired marker. To toggle the history of trails for all markers on and off, press the TRAIL button.



## 5.16 TrailX (History Trail Edit)

To edit what you want to see for history trails, select the TRAILX and an edit window will appear. This function will allow you to choose how many history location points (or breadcrumbs) you want to see, or you can select it by time frame, as in how many minutes of activity you want to view. This function will allow you to see some amounts of travel history but not clutter your screen with the travel of someone's whole session. The TRAILX function works independently for each user symbol.



- To set TRAILX:
- Hook the desired symbol to change the TRAIL
- Select TRAILX
- Enter the desired time frame and max points
- Select OK

### 5.17 XMIT POS

The Xmit Pos transmits a digital command to all Users LifeRing Users through the LifeRing Network Server causing them to report. This is used to update the position and status of Users between their preset reporting intervals. When the LifeRing User selects the REFRESH function, all Users LifeRing symbols go lost, and the symbols will begin to blink. As the Users begin to update, the Users symbols return to normal. You will then have the most up to date location on all symbols.



Click and drag the mouse to move the map.

## 6.2 Center

This feature centers the Tactical Map on the LifeRing Users Own Position or on any selected/hooked Symbol. Any selected symbol will automatically be centered on the Main Map.

The Main Map area is the working space for most LifeRing functions.

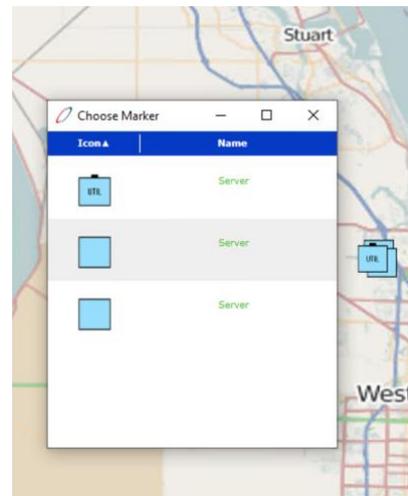
The LifeRing Main Map Area contains maps with the geo-referenced symbols of the LifeRing Users and the markers that they have entered.

Maps of many types can be loaded and displayed by LifeRing using the LifeRing mapping system which is based on a Geographic Information Systems (GIS) technology.

The Map display always contains a crosshair cursor (a blue +) when no markers are selected

Use the mouse to move the cursor around the LifeRing main tactical map. Observe that range and bearing from the local symbol to the position illustrated by the mouse cursor is displayed in the local symbol readout area.

If you move the cursor to a symbol, the symbol will be selected. Information pertaining to the selected symbol is displayed in the HOOK READOUT window.



When a symbol is hooked, a blue circle will appear around it. To unhook a chosen symbol, click on the symbol again, or any other place on the map, with your mouse.

Sequence Selecting: You can select the desired symbol even if multiple symbols appear to be stacked on top of each other. Click in an area of Symbols and a selection window will display allowing you to choose or “hook” the desired symbol.

Selecting from the USERS list: You can also select a User by using the USERS list. To select a User from the list, click the USERS list icon to display the list of Users. Click on the label of the LifeRing User that you want to select. The label of the LifeRing User will become highlighted, indicating that his symbol has been selected on the main map.

A “lost” symbol: Users that fail to report position and status for two consecutive reporting intervals begin to flash on the Main Map display of the other Users.

User Symbol Labels: All LifeRing User symbols are accompanied by a label which differentiates them from each other. However, it is possible for two Users to have the same Name. Symbol labels flash when the reported GPS status indicates that

this Users position is unreliable. A flashing label indicates that the position of a User is possibly inaccurate. The position of this Users symbol is the last known accurate location.

### 6.3 Vector Outline

Select the Map types you want to display on your PC. See below for descriptions:

- Coast - displays coast lines
- River - displays major rivers
- Borders - displays political boundaries

### 6.4 Raster

The LifeRing Server Administrator determines which map types will be displayed when the PC client operator selects Commercial, Military, and Satellite. Those map types are configured on the LifeRing Image Server. On the LifeRing Image Server, the currently available map sources are:

- Pixar Link
- Bing Hybrid
- Bing Imagery
- Bing Street
- Google Hybrid
- Google Imagery
- Google Street
- LifeRing Commercial
- LifeRing Military
- LifeRing Imagery
- LifeRing Internet
- RNC / NOAA\_RNC

If you are connecting to the AGIS FL server for the purposes of demonstrating the LifeRing software, the sources selected are:

- Internet: World Street Maps
- Commercial – Commercial source images
- Military – NOAA\_RNC
- Satellite – World Imagery
- Other – Place holder for custom map
- SAR – Requires Security Clearance to enable
- Mil Image – Requires Security Clearance to enable
- Com Image – Requires Security Clearance to enable

### 6.5 Vector

Select the Map types you want to display on your PC. See below for descriptions:

- Tiles – Coming Soon
- NOAA (National Oceanic and Atmospheric Administration) North America

### 6.6 Weather

Select the Map types you want to display on your PC. See below for descriptions:

- NOAA – Weather overlay for North America

- World – Weather overlay for World

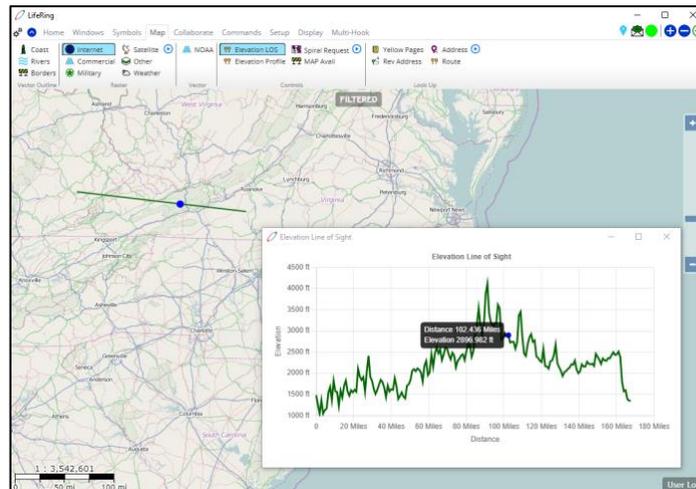
## 6.7 Controls

Select the Map additional features as you want to see displayed on your PC.

### 6.7.1 Elevation LOS (Line of Sight)

This allows you to draw a line between any (2) points on the map and see the elevation changes along that line.

- Click the Elevation LOS button
- Click on a point on the map, move the mouse to another point and click again to draw a straight line.
- After a few seconds, you'll get a window showing the axis of distance and the elevation changes over that distance on that exact line.

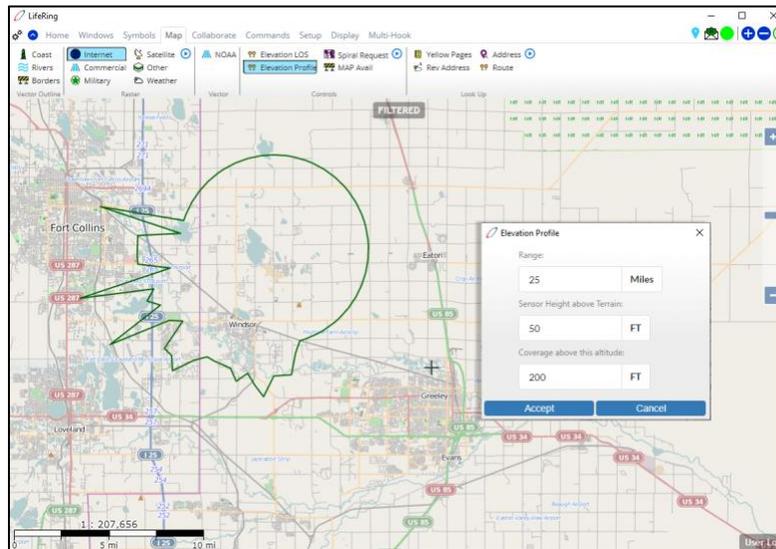


You can move your mouse along the graph and see what elevation corresponds with which points on the map.

### 6.7.2 ELEVATION PROFILE

This allows you to set a Range and Radar Sensor height as well as an altitude of aircraft you want to be able to detect and this function will generate a radius from your desired position showing if there are any mountains or other geographic features that would block your radar emission.

- Click on a point on the map
- Click the Elevation Profile button
- In the pop up window enter the Range, Sensor Height and Coverage Altitude and click Accept
- After a few seconds, radius drawing on the map.

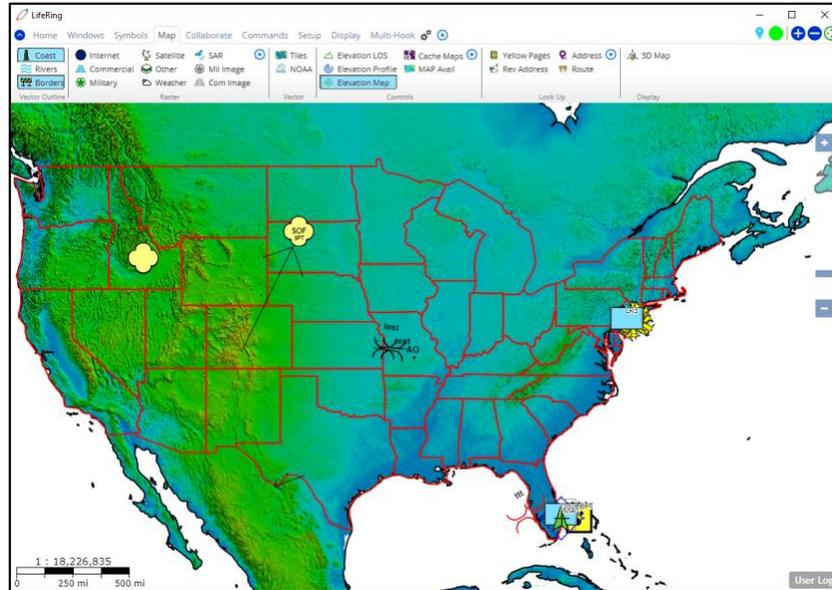


The part of the radius that shows a smooth circle means there are no obstructions within the set range. All of the jagged points represent an obstruction that is blocking the radar sensor emission at that point on the map.

### 6.7.3 ELEVATION MAP

This allows you to view graphic elevation data on the map. (North America only at the moment)

- Click the Elevation Map button



#### 6.7.4 CACHE MAPS

This allows you to pre-cache map tiles to your local device so they will be available if you lose internet or connectivity to the LifeRing server.

- Pan/Zoom to your desired area on the map
- Click the Cache maps button
- Enter a Zoom Level that is no more than 2-3 greater than the current Zoom level.
- Click OK
- 

You will get a window showing the download progress. Once complete, you will now have map tiles displaying at that area and zoom whether you have internet or not.

#### 6.7.5 MAP AVAIL. (Not currently Enabled on Evaluation Servers)

The Map Avail feature enables the PC client to load, in a given area, a map type other than is delivered by default by the LifeRing server. By default, the same WMS sources are available to the PC client from this dialog as are available to the LifeRing Server Administrator.

The Map Avail enables the LifeRing User to request specific map data to be pushed by the LifeRing network Server. Select the Map Avail from the menu. Select the scroll bar to view a list of the available map sources. Highlight the map source to obtain that image then press select to request the map from the server.

The downloadable LifeRing maps that may be available include:

- Open Street
- World Street

- Weather
- MapQuest Street
- World ToPo
- Landsat7 Imagery Psuedo
- Bing Hybrid
- Bing Imagery
- Landsat7 Imagery Natural
- Bing Street
- Google Imagery
- DOQ (Greyscale aerial imagery)
- Google Hybrid
- Google Street
- DRG (USGS ToPo Maps)
- NIMA/USGS (Hires Imagery)
- World Imagery
- Sean Pixa
- RNC NOAA

(Note: Must be connected to Internet to access)

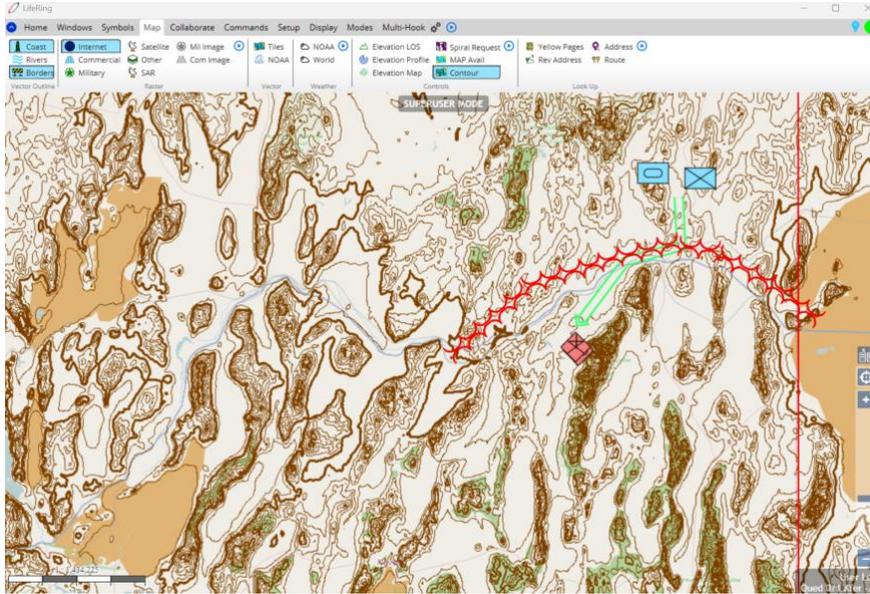
When you select to download a map for a specific area, the map that downloads may only cover the portion of the screen that you are currently viewing. It also only downloads for the selected zoom level. If you zoom in, the map will still be there, but will be blurred. If you would like another zoom level, you can download another map while at the desired zoom level. You are not limited to one map, one level, or one location.

Also if a map doesn't appear you may need to change the selected icon.

For example, if you download a "World Imagery" map, it will not appear on the screen if the SAT (Satellite) is not selected. "If this feature is used, you will need to coordinate with the LifeRing Server Administrator to determine what settings are needed to display each map type. These options available in this dialog are fully customizable."

### 6.7.6 Contour

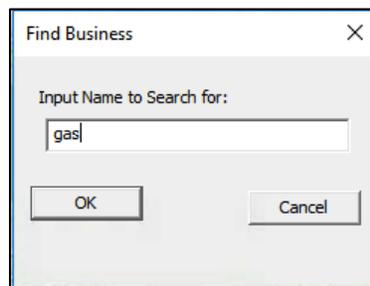
A contour map, also known as a topographic map, uses contour lines to represent the elevation of the land surface, showing valleys, hills, and the steepness of slopes.



## 6.8.Look Up (Not currently Enabled on Evaluation Servers)

### 6.7.7 Yellow Pages

Type a business name or type (Gas, Food, etc...) into the search field and click "OK."  
The map will display your search results.



### 6.7.8 Rev Address

Click a point on the map and select the Rev Address button to get the street address of that location. Note. Works most effectively at a higher zoom level.



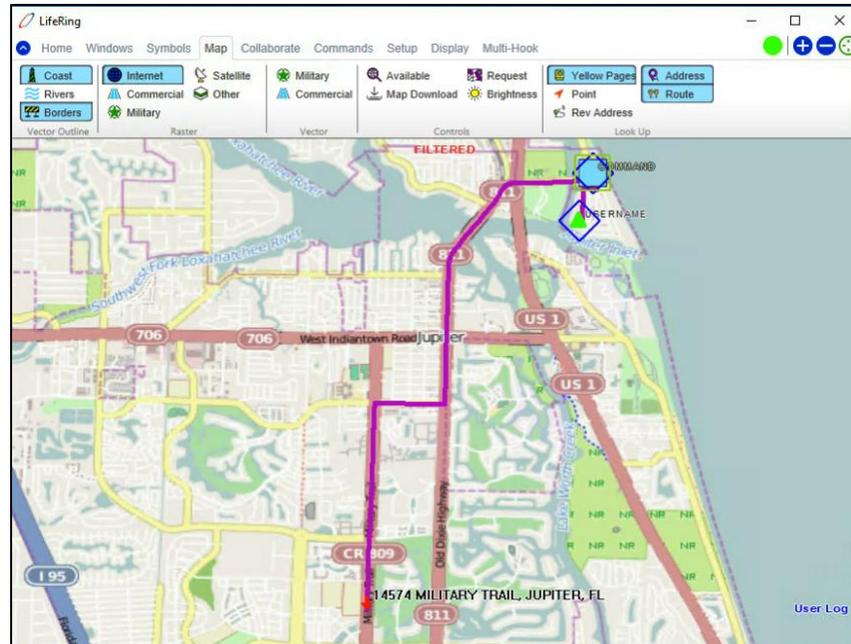
### 6.7.9 Address

Type in a street address to pinpoint that exact Point on the map.



### 6.7.10 Route

Click a point on the map and select the Route button to show a street by street route from your User symbol to that point.



### 6.7.11 3D Map

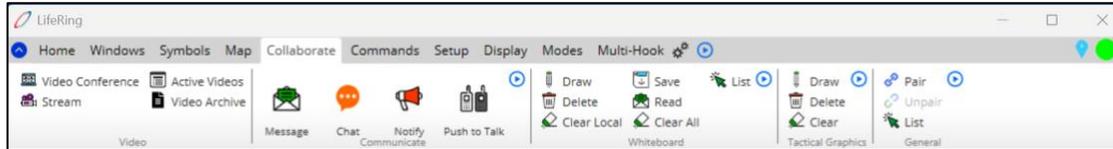
Allows you to see 3D maps in the LifeRing display.

- Pan/Zoom to your desired area on the map
- Click the 3D maps button
- Hold down the Control Key on your keyboard and use your mouse icon to tilt/pan the map to your desired perspective.
- Click the 3D maps button again to go back to previous map



## 7 COLLABORATE

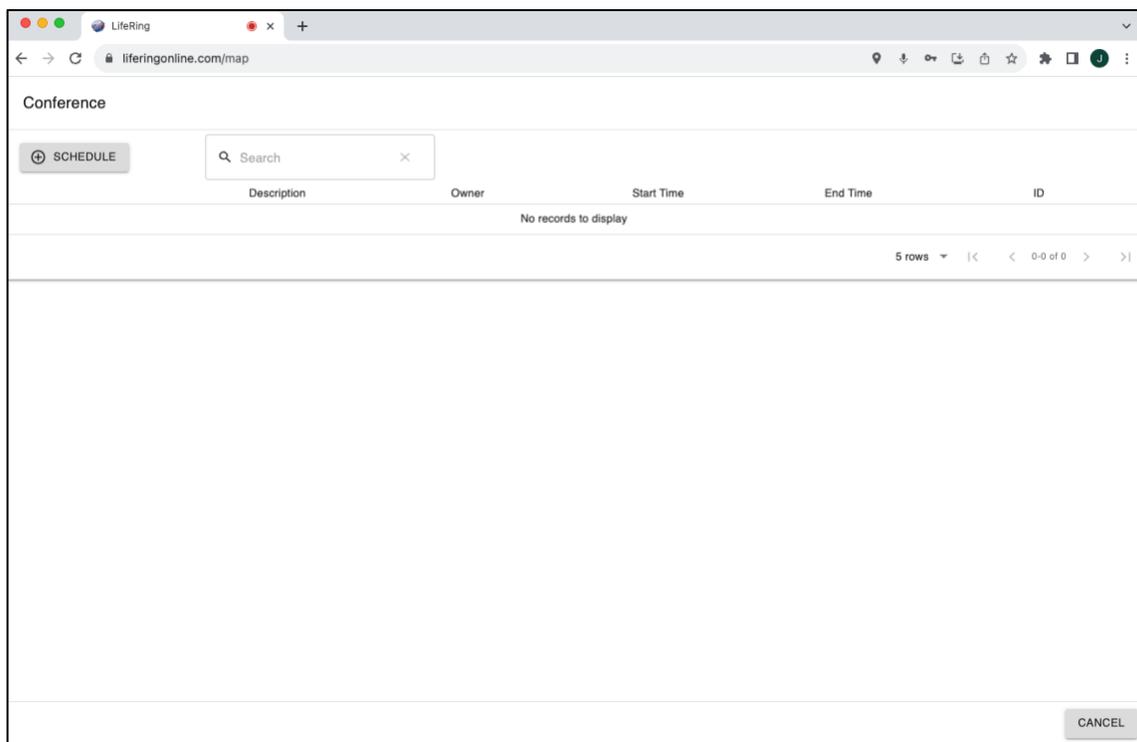
The Collaborate section features multiple tools allowing users to share information with each other.



### 7.1 TEV (Tactical Encrypted Video-conference)

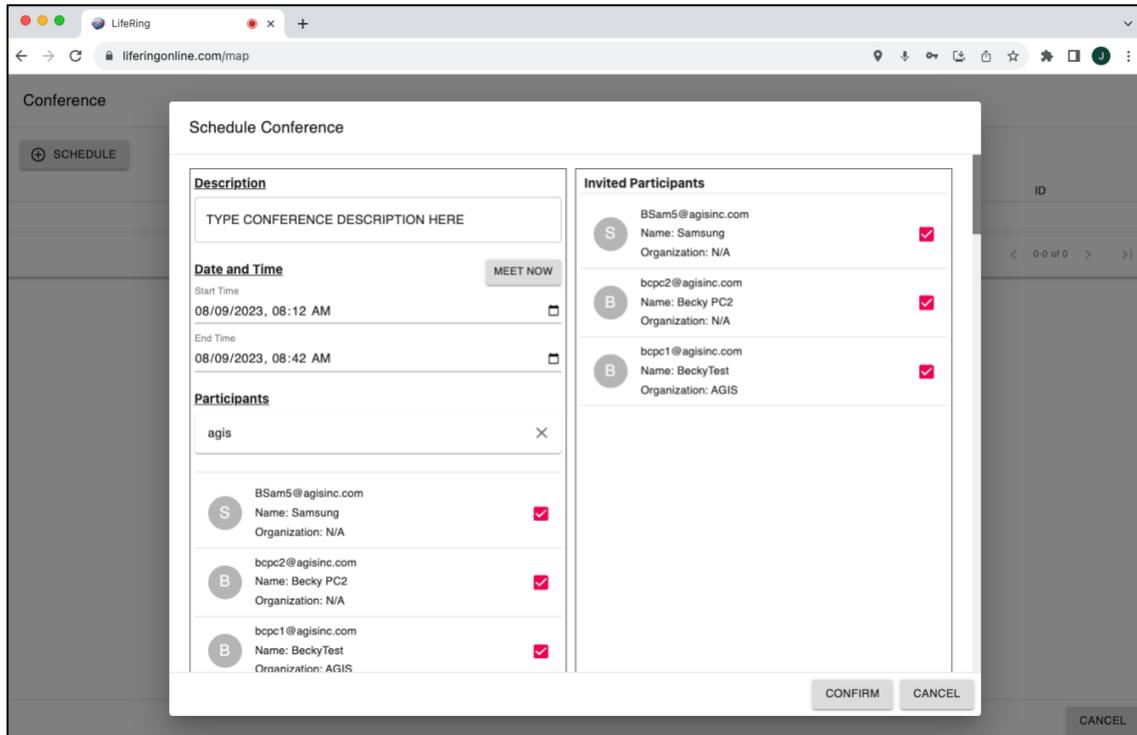
Set up a video conference inside of LifeRing

- Click the Video Conference button to open the conference home page. Here you can schedule a conference and/or see any/all conferences you have coming up.



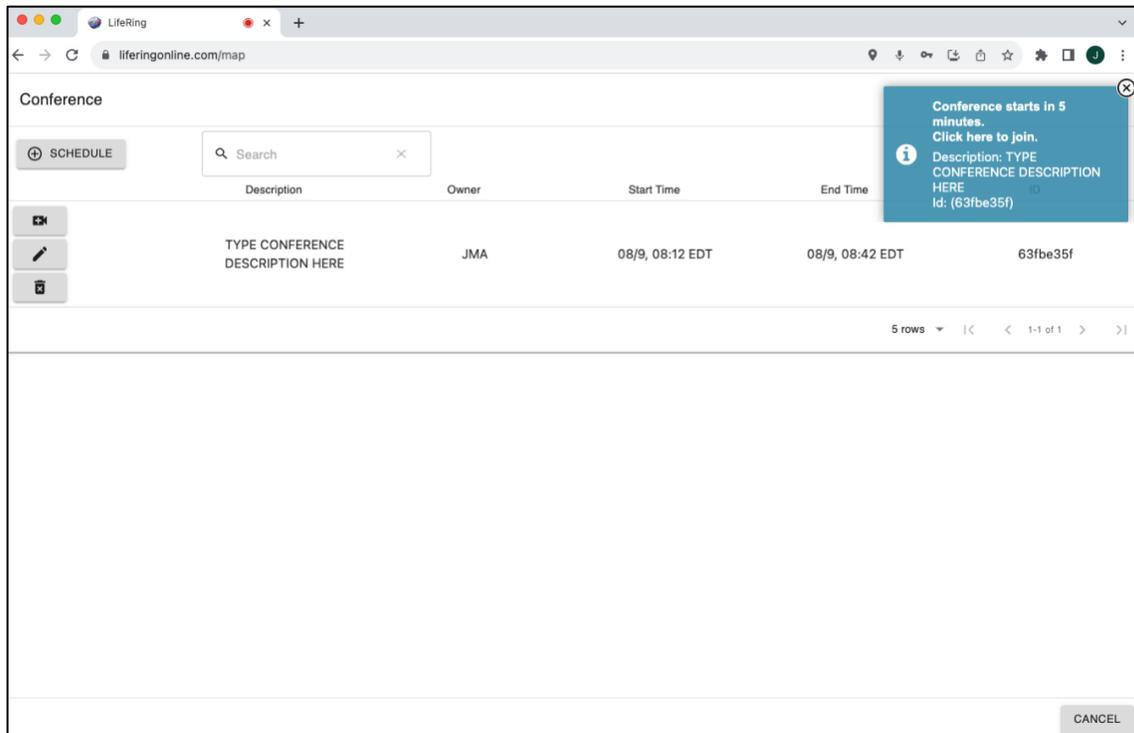
- Click the Schedule button to create a new conference.
- Type in a Description
- Choose to Meet Now or set a later date/time.
- Add Participants by their account email address.
- You can type partial addresses and then choose from the list below.

- Click the box next to the name you want to invite. You will see them added to the Invited Participants list on the right.
- When you are done adding participants, click the CONFIRM button.

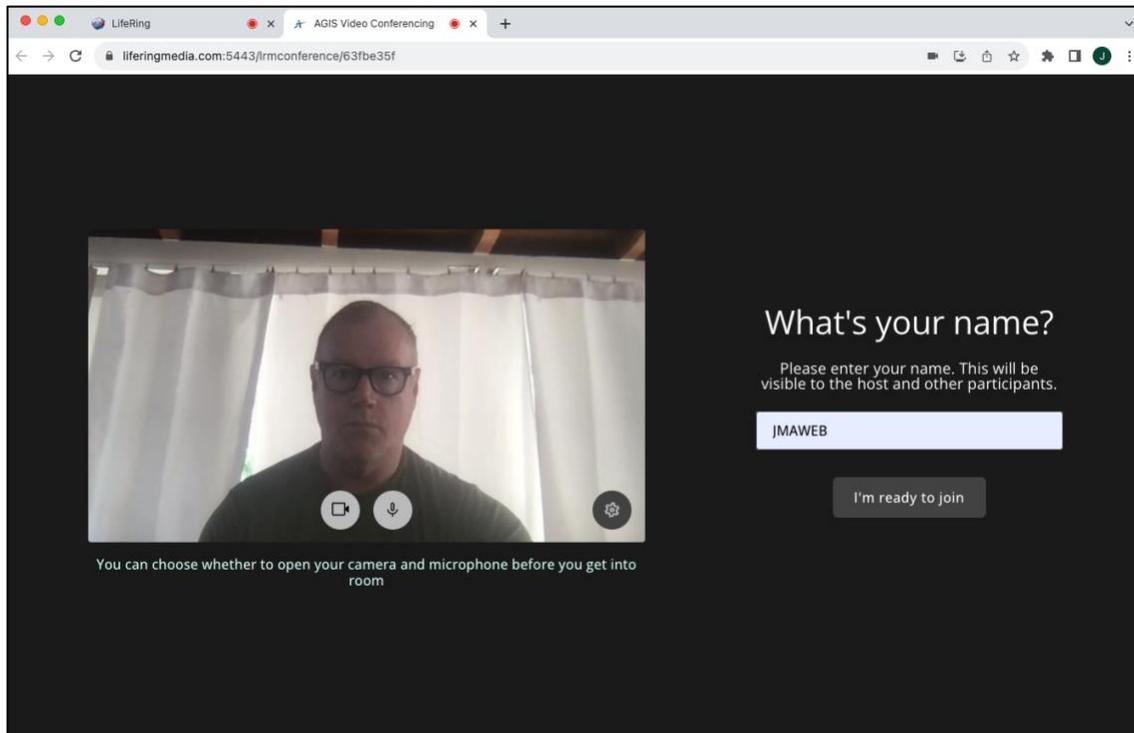


You will now see the conference listed in your dashboard. You will also see the conference notification in the upper right. This is the same notification that all your Invited Participants will receive.

- Click the Camera icon to start the conference
- Click the Pencil icon to edit the conference
- Click the Trash icon to delete the conference

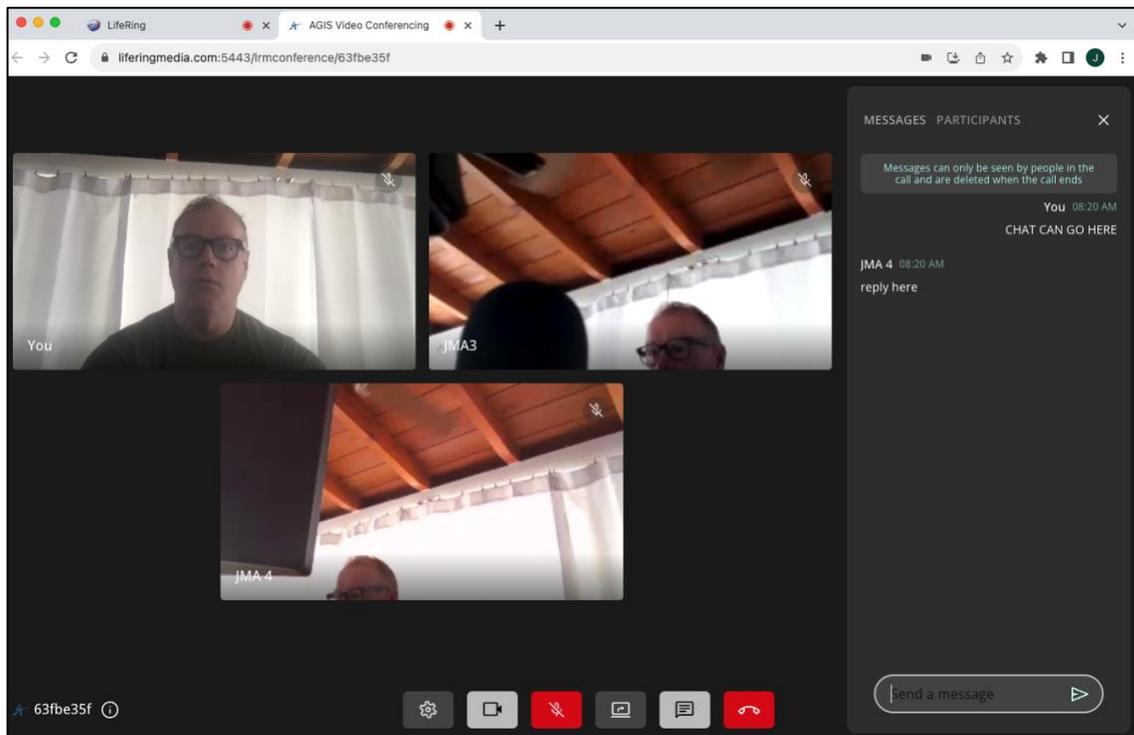


- Click the Camera icon to start the conference
- You will now see a preview of how you will appear in the Video Conference.
- Click the Camera icon to toggle on/off your Camera
- Click the Microphone icon to toggle on/off your Microphone
- Click the Settings icon to manage your Camera, Microphone and Background options
- Type in the Name you want to display in the Video Conference and click the I'm Ready to Join button

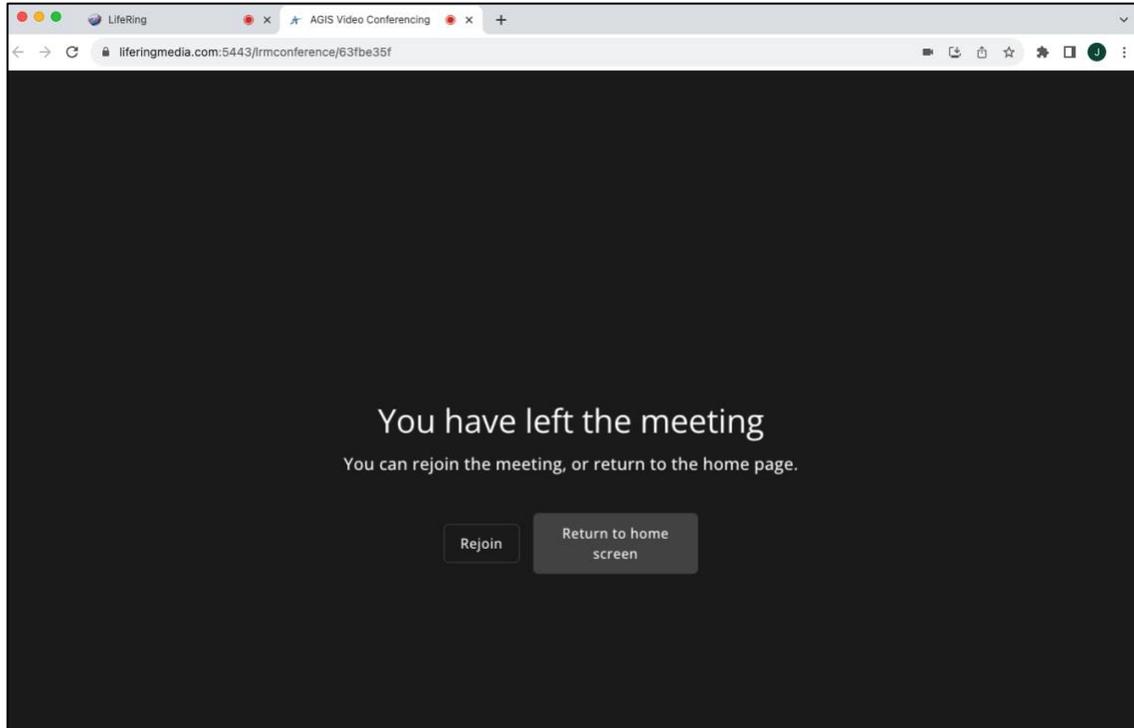


You will now be in the conference with any/all Participants who have joined.

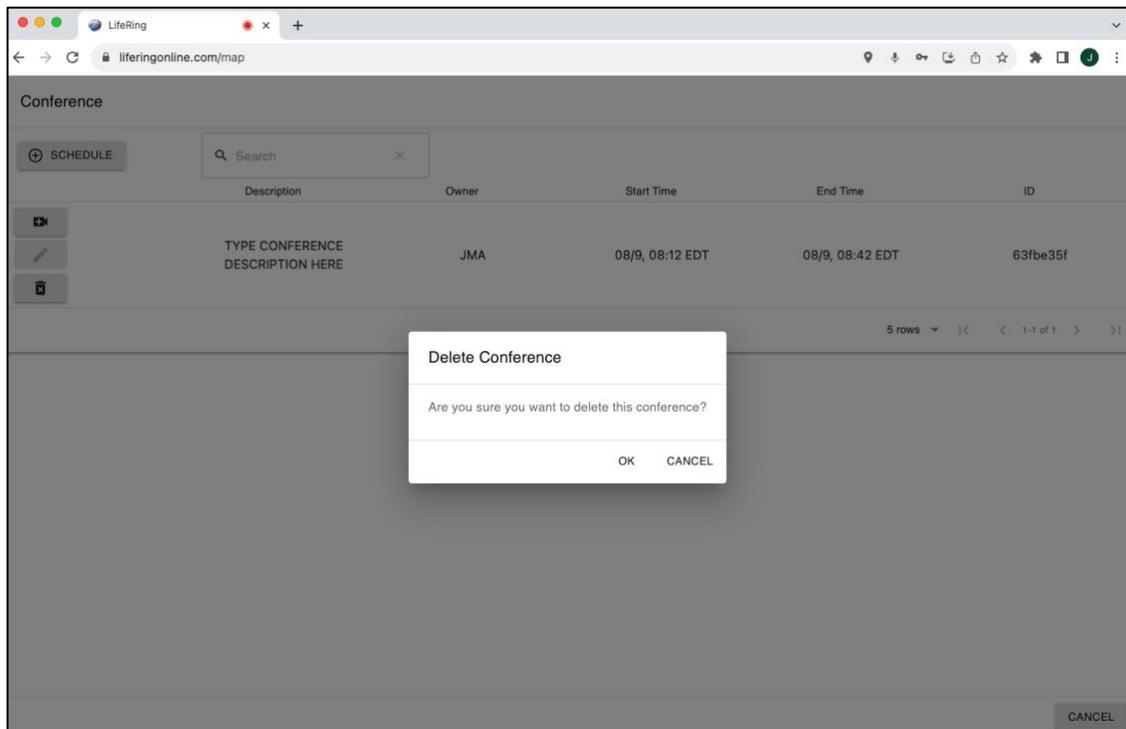
- Click the Settings icon to manage the Layout of the stream tiles as well as your Camera, Microphone and Background options
- Click the Camera icon to toggle on/off your Camera
- Click the Microphone icon to toggle on/off your Microphone
- Click the Screen icon to Present now and share your screen
- Click the Chat icon to open the Chat drawer on the right. This also shows you the Participants Tab.
- Click the red Phone icon to end the conference



Once you've ended the conference, you have the option to Rejoin or Return to the Home Screen



From the Home Screen, you can delete the conference. Click OK and then click Cancel at the bottom right of the screen to return to the LifeRing Map.

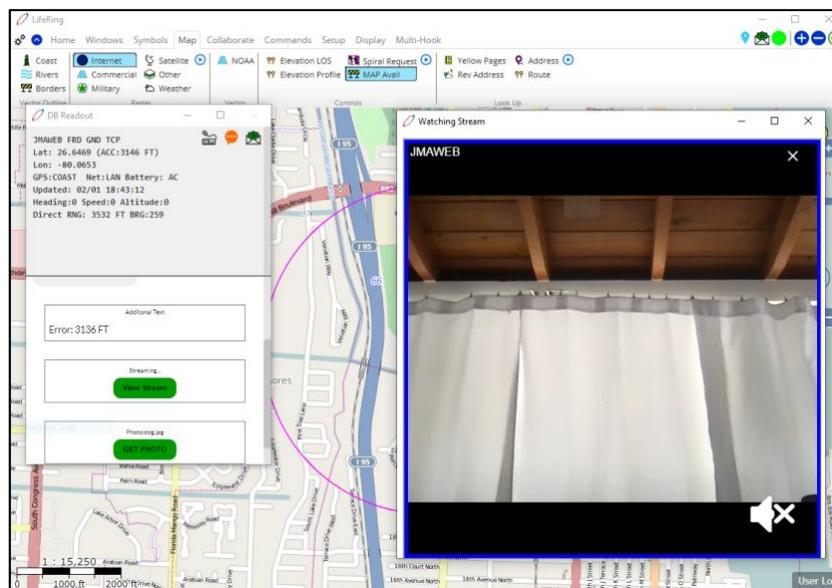


## 7.2 Stream

This allows you to publish a video stream from your integrated or external USB webcam.

To Produce a Video Stream:

- Click the Stream button
- In the stream preview window, click the Red circle to begin Publishing
- Click the Options button to change your default Video and Audio inputs
- Click the Stats button to view your Audio and Video data levels
- Anyone Publishing a stream, will display a Light Blue diamond around their User icon to view another User's stream, hook their icon and click the View Stream button in their hook readout.

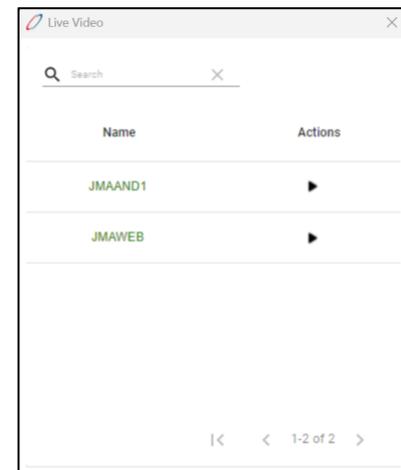


- Click the Red circle again to stop publishing your stream

## 7.3 Active Videos

This displays a list of all live Streams

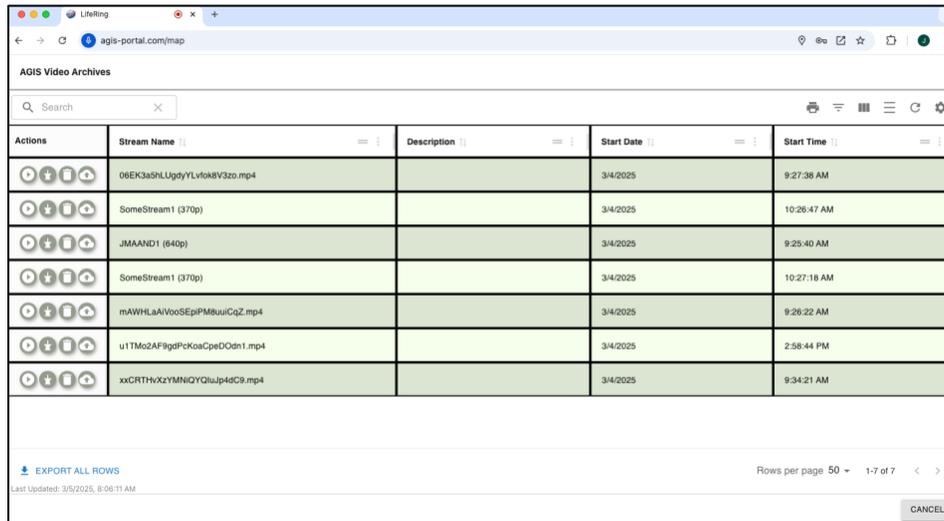
- Click the Play icon/button to view the stream



## 7.4 Video Archive

The Video Archives section displays all past Video Streams.

- Click the Play Icon from the Actions column to play the video.
- Click the Pin icon from the Actions column to lock that video title at the top of the list.
- Click the Trash icon from the Actions column to delete the video from the list.
- Click the Cloud icon from the Actions column to save the file to the server.
- Click the Export All Rows link to create a PDF of the Archive list

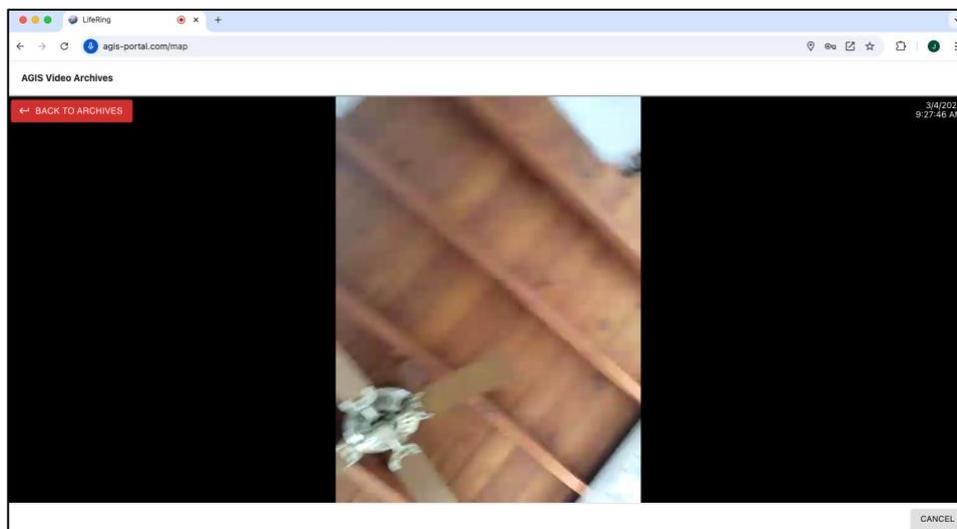


The screenshot shows a web browser window with the URL 'agis-portal.com/map'. The page title is 'AGIS Video Archives'. Below the title is a search bar and a set of icons for actions (play, pin, trash, cloud, export). The main content is a table with the following columns: Actions, Stream Name, Description, Start Date, and Start Time. The table contains seven rows of video stream data.

Actions	Stream Name	Description	Start Date	Start Time
[Icons]	06EK3aSHLUgdyYLv0k8V3zo.mp4		3/4/2025	9:27:38 AM
[Icons]	SomeStream1 (370p)		3/4/2025	10:26:47 AM
[Icons]	JMAAND1 (840p)		3/4/2025	9:25:40 AM
[Icons]	SomeStream1 (370p)		3/4/2025	10:27:18 AM
[Icons]	mAWHLAANvooSEpPMbuuicqZ.mp4		3/4/2025	9:26:22 AM
[Icons]	u1TMo2AF9gPcKoaCpeDOdn1.mp4		3/4/2025	2:58:44 PM
[Icons]	xxCRTHXZYMNQYQIuJp4dC9.mp4		3/4/2025	9:34:21 AM

Below the table, there is a link 'EXPORT ALL ROWS' and a 'Rows per page 50' dropdown. At the bottom right, there is a 'CANCEL' button.

- Click the BACK TO THER ARCHIVES button to return to the list of video streams.
- Click the CANCEL button to return to the Map.



Across the top of the screen are various tools to sort and filter the list of Video Streams.

- In the Search field you can type in all or part of the Stream name.

- The Print icon will send the list to your printer.

Actions	Stream Name	Description	Start Date	Start Time
	JMA AND1 (640p)		3/4/2025	9:25:40 AM
	06EK3a5hLUgdyYLVfok8V3zo.mp4		3/4/2025	9:27:38 AM

EXPORT ALL ROWS

Last Updated: 3/5/2025, 8:11:11 AM

Rows per page 50 1-2 of 2

CANCEL

- The Filter icon opens the filtering options for each of the columns.
- Tap the Filter icon and choose the Filter Mode.
- Type in your search

Actions	Stream Name	Description	Start Date	Start Time
	JMA AND1 (640p)		3/4/2025	9:25:40 AM
	06EK3a5hLUgdyYLVfok8V3zo.mp4		3/4/2025	9:27:38 AM

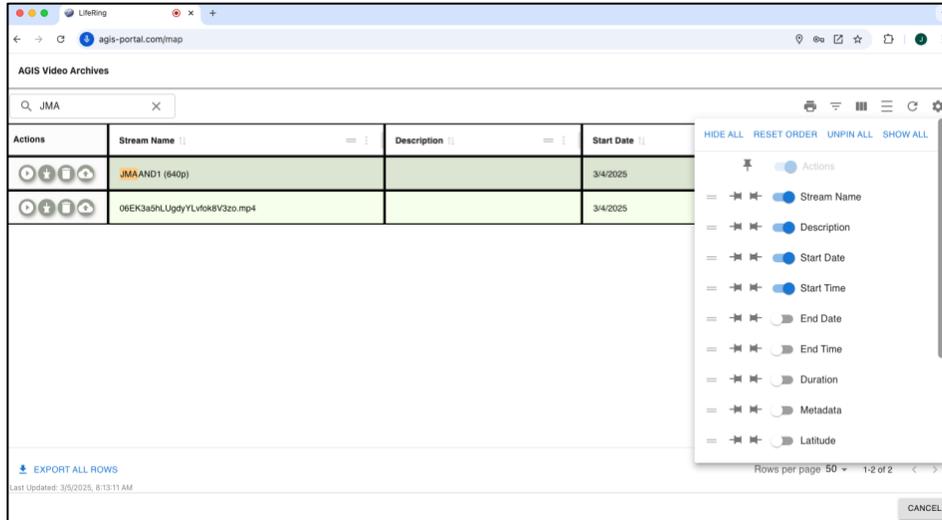
EXPORT ALL ROWS

Last Updated: 3/5/2025, 8:12:11 AM

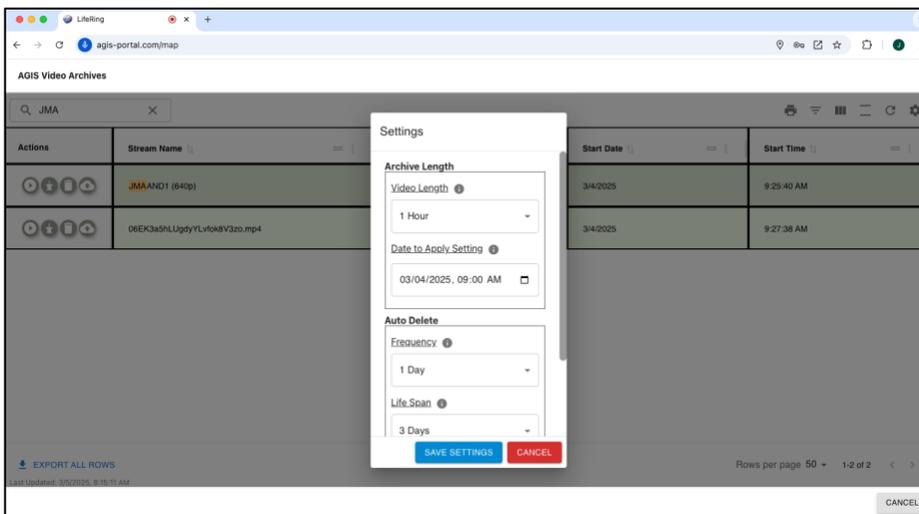
Rows per page 50 1-2 of 2

CANCEL

- Click the Column icon to hide/display the columns of Stream data.



- Click the Spacing icon to change the height of the Stream rows
- Click the Refresh icon to refresh the list with any new streams.
- Click the Settings icon to manage Archine Settings. Tool tips are available to explain each setting.
- Click the CANCEL button at the bottom to return to the map.

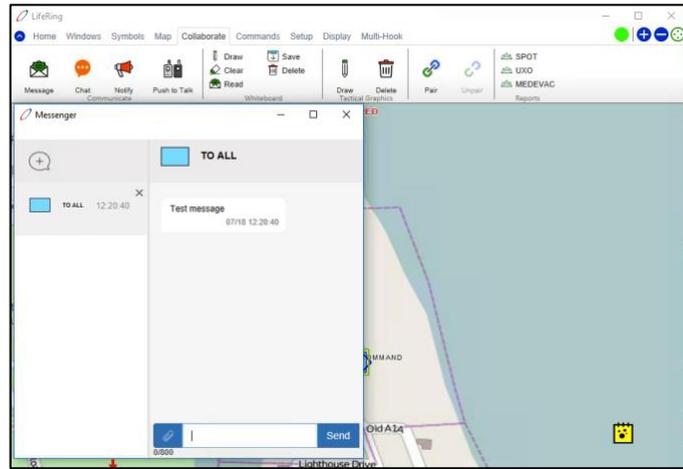


## 7.5 Messages

The LifeRing Operator receiving a message is alerted in (2) ways:

- An audio alert, “Message Received.” (audio can be silenced)
- A message icon will appear in the upper right of the main menu.

Selecting the Message icon causes the menu to open.



To send a Text Message to a User:

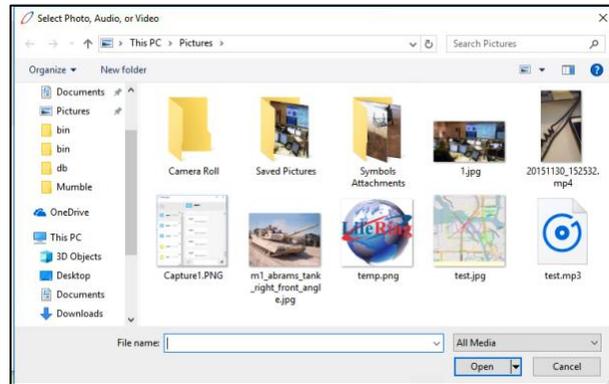
- Select the “MESSAGE” feature from the COLLABORATE Submenu
- Select the LifeRing User to address a message to by selecting their name. If you would like the message to go to all Users, select the + icon in the top left corner or select the conversation group “TO ALL.”
- Type the Message you would like to send in the Textbox
- Click send

### Media Message

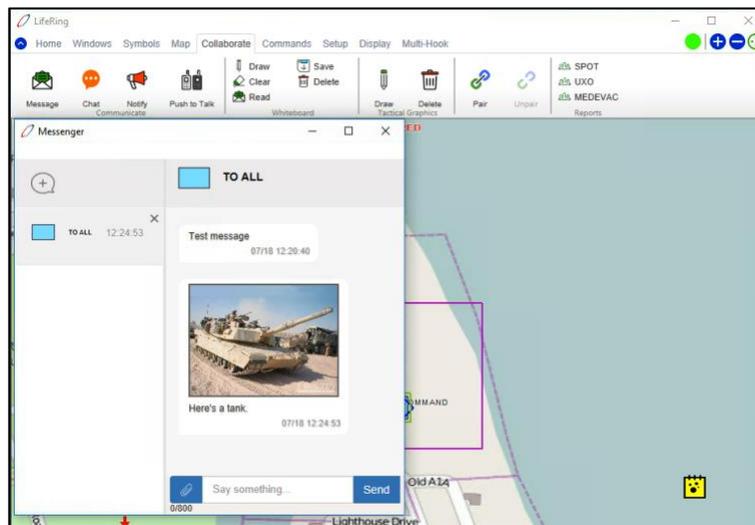
The Media Message feature provides the LifeRing Operator a means to send photo, audio, and video messages to other LifeRing Users as well as most common file types.

To send a Media Message:

- Select the “MESSAGE” feature from the COLLABORATE Submenu
- Select the LifeRing User to address a message to by selecting their name. If you would like the message to go to all Users, select the + icon in the top left corner of the window or select the conversation group “TO ALL.”
- Select the paper clip icon next to the text box.
- Windows File Explorer will open to allow you to choose from media files on the hard drive. It will open to the default Windows Photo folder, but can be navigated to other folders. Double click on a file or photo, audio, or video clip.

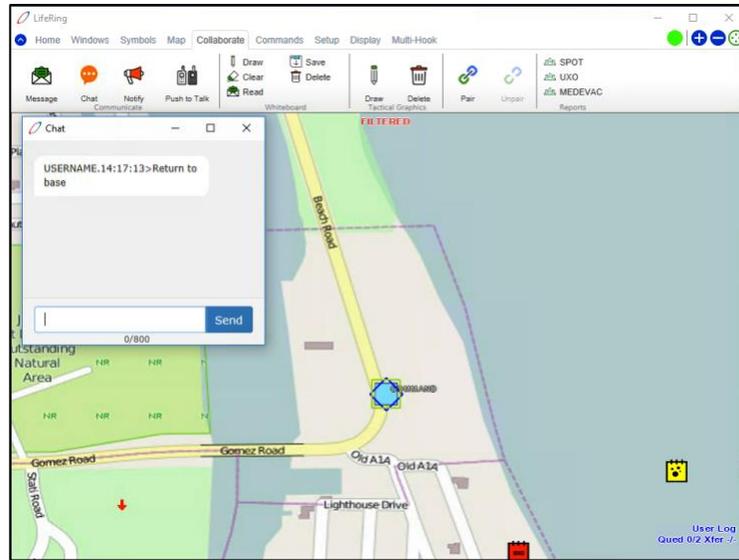


- The photo, audio, or video file chosen will be previewed in the messenger window. To cancel sending the photo you selected, click the “X” that appears over the top right corner of the preview of the media file. Press Send to send the photo to have chosen. Note that if you do not click send, the media message will not be sent to the intended recipient(s).
- Click on the any sent or received media message in the Messenger Window to open the file in the computer’s default application for that file type.



## 7.6 Chat

The Chat function enables LifeRing Users to exchange real time Chat messages. Chat messages are sent to and received from everyone in your active group. This is like a real time instant messenger meant for quick mass communications. For the convenience of LifeRing Users we have placed this feature in two locations; the HOME submenu and the Collaborate submenu. Please see Section 3.2 Chat for details on how to use this feature.



## 7.7 Notify

Notify allows the user to send messages to large groups of users. The recipients of the message can be chosen by geographic bounds. Two options are available. Box Bounds and Poly Bounds that allow the user to set an area on screen and send a message to all users that are geographically located inside that area.

If you select Active Users, then whatever you have entered in the Text box will be sent, using the normal LifeRing Messages, to each User you can see on your screen. This communication is Encrypted, thus the title on the box. It uses standard LifeRing messaging, which is always encrypted.

The Expires field comes in to play if there is a participant with intermittent comms. If they are visible on your display but do not receive the LifeRing Message immediately, the LifeRing Server will hold on to that message for the duration of Expires, and deliver the message as soon as they reconnect to the server.

The Box and Poly Bounds can be used to designate a geographically based subset of your active users to receive the LifeRing message.

The GCM Plain Text Message is selected, then the information in the Title and Text field will be sent, via GCM, to every handset that has ever connected to the LifeRing

server that the PC client is currently logged on to. This message is NOT encrypted, but sent using standard GCM Android and iOS notification.

Regardless of whether LifeRing is in the foreground or even running, the Notification will be received.

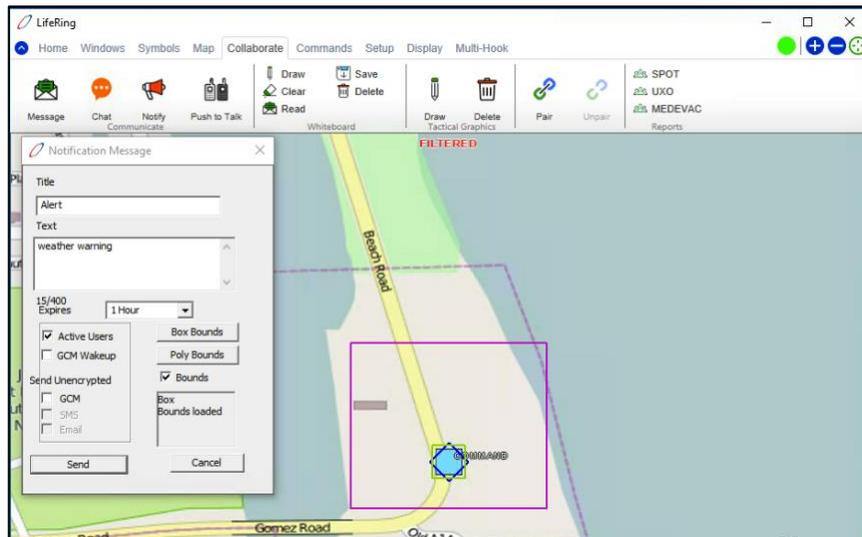
On both Android and iOS, if you tap this notification, you can be taken to LifeRing, which will be launched if it is not already open. iOS does require you to tap the notification, then select Open or swipe the Notification to the side.

The GCM Wakeup in an Encrypted message, sent via GCM to each handset that has ever connected to that LifeRing server, that will start LifeRing if it is not already running.

It will be labeled “Important Message” in iOS or “Priority Message” in Android. If you tap on the Notification, LifeRing will be brought to the foreground or launched if it was not already running.

To send a Notification:

- Enter a title and text for the message.
- Make sure the Active Users Checkbox is checked to send to all users that are currently signed online.
- Click the Box Bounds or Poly Bounds
- Click and drag the mouse on the map to define the area.
- Release the mouse button to finalize the area.
- Press the send button to send the message to all users within the area.
- SMS and Email are not currently available.

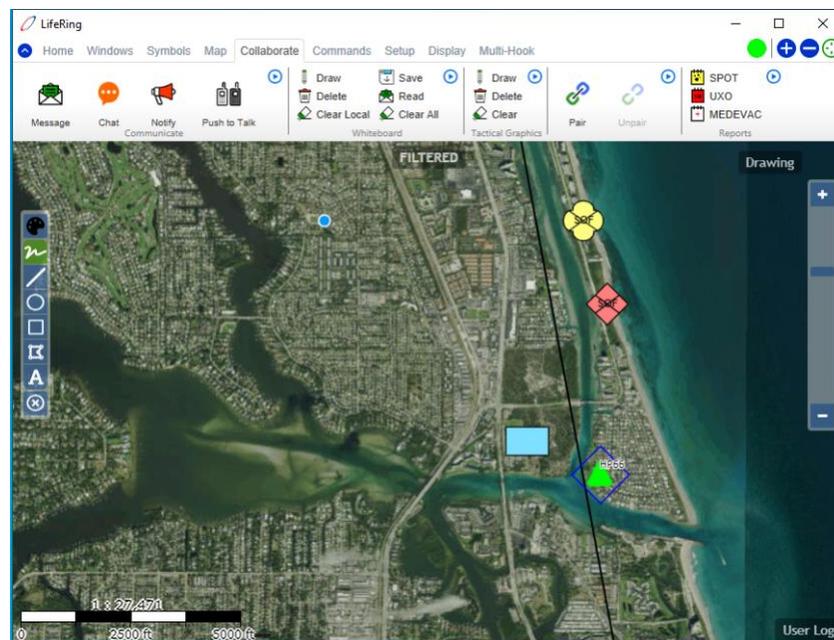


## 7.8 Push To Talk (PTT)

LifeRing PTT uses Internet Protocol (IP) to exchange voice communications. LifeRing PTT converts sounds into digital data to be transmitted over IP channels where they are translated back to sounds on the receiving LifeRing device. For the convenience of LifeRing Users we have placed this feature in two locations. The Home Menu and the Collaborate Menu. Please see Section 3.1 Push To Talk (PTT) for details on how to use this feature.

## 7.9 Whiteboard

White Boarding is a means to communicate with other LifeRing Users by drawing on the Map and having that illustration display on the Maps of all other Users.



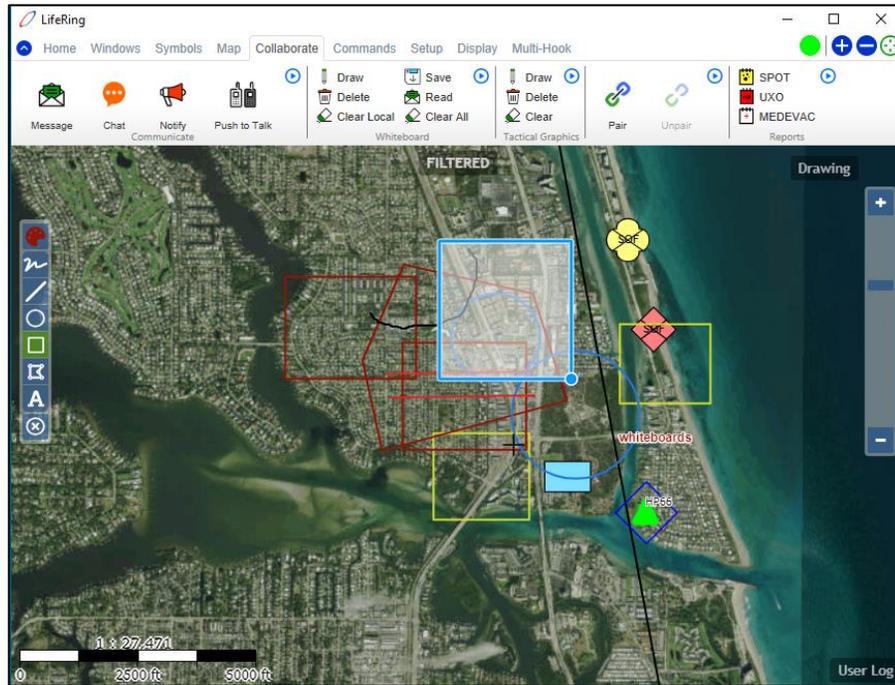
### 7.9.1 Draw

Select the COLLABORATE Submenu

Go to the Whiteboard section on the far right for all the Whiteboard feature options

- Select Draw
- Select a color from the color palette.
- Select the type of tool you wish to use to draw on map
- Freeform
- Line
- Circle
- Square
- Polyline

Use the mouse to draw any image by clicking and dragging it slowly (for best results) around the Map Screen.



All participating LifeRing Users will be able to view the illustration in a matter of seconds. (Multiple LifeRing Users can Whiteboard simultaneously.)

### 7.9.2 Clear

The Clear option clears all Whiteboards from the Users Main Map. It also clears the Whiteboard you have created on all other user's Main Maps.

### 7.9.3 Clear All

The Clear All option deletes all Whiteboards you have created from your map as well as other user's maps. Clear All also removes Whiteboard marks that other users have created from your map, but It does not permanently delete them. Other users in the group will continue to see the whiteboard marks that were cleared from your view.

### 7.9.4 Read

The Read option allows a user to recall a previously saved Whiteboard. Clicking the Read icon displays a list of the saved Whiteboard. Selecting a saved Whiteboard causes it to be displayed again on the Main Map area for all Users to see. Note: Whiteboards may also be deleted here by highlighting the file and selecting the Delete button at the bottom of the window.

### 7.9.5 Delete

The Delete option displays a list of each section you have drawn. Selecting that segment and click the “Delete” button removes it from the map.

### 7.9.6 Save

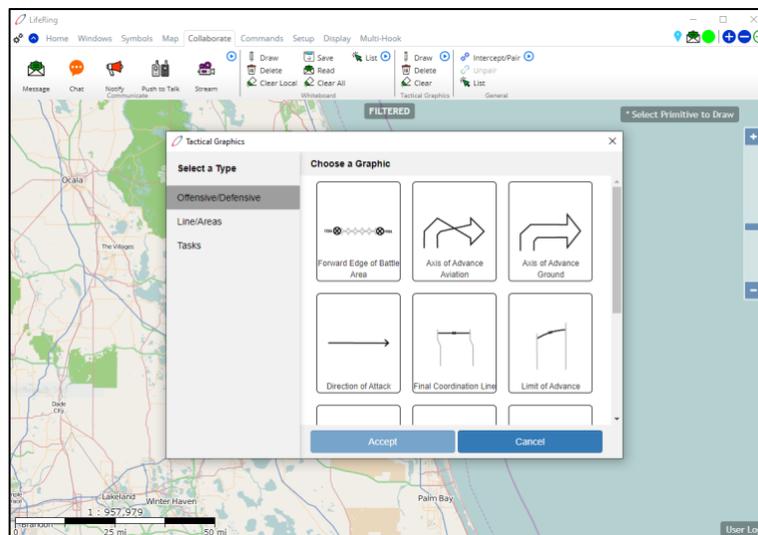
The Save option allows you to Name” Whiteboard to a file and the Whiteboard screen will be saved as a .dwg image in the local My Pictures folder.

## 7.10 Tactical Graphics

This allows you to draw on MILSTAND Tactical Graphics directly the Map and having that illustration display on the Maps of all other Users.

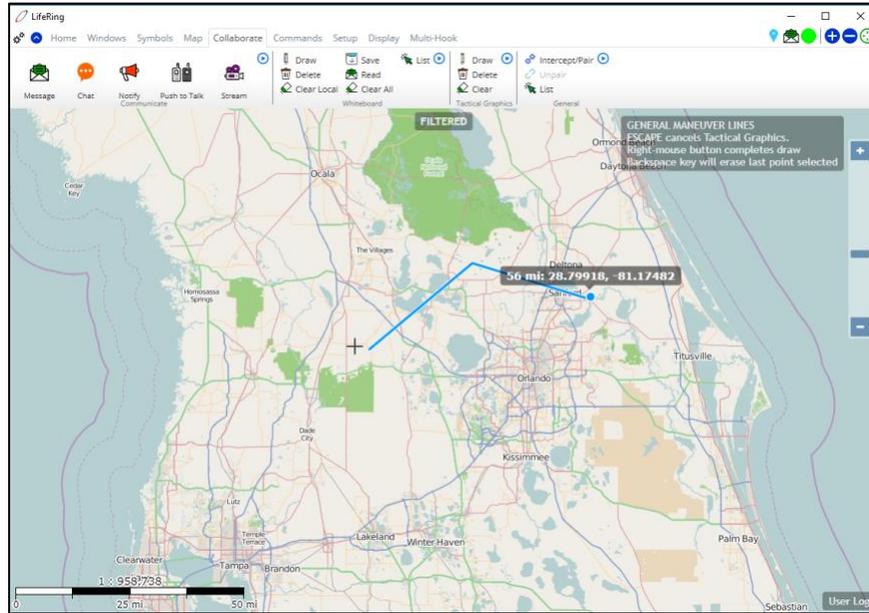
### 7.10.1 Draw

Click the Draw icon to bring up a menu of available Tactical Graphics. They are broken down into Offensive/Defensive, Lines/Areas or Task Graphics. The Black lines in the sample drawings are the actual lines being drawn. The Grey lines are optional supporting lines that usually accompany that graphic.



Select the graphic you want to draw.

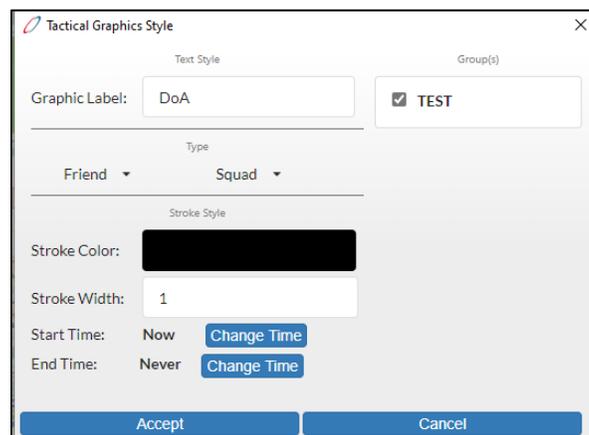
This will immediately put your cursor in drawing mode. Left click on a point to start and move your cursor to the next point and left click. This will draw a line between the (2) points.



### 7.10.2 Style the Tactical Graphic

When you are done drawing all the lines required, right click the mouse to complete your drawing. This will bring up a styling window.

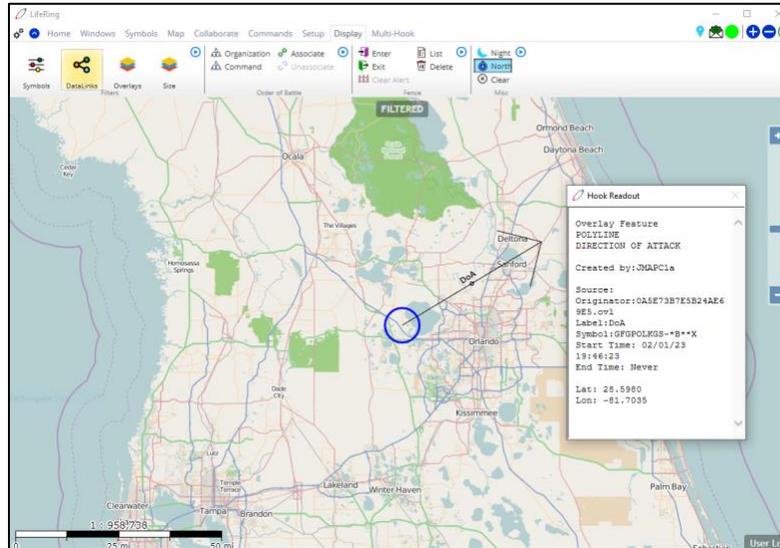
- Label your Tactical Graphic
- Pull down to select a Type (None, Friend or Hostile)
- Pull down to choose an Echelon
- Choose the Stroke Color and Width
- Choose a Start Time for when you want it to display
- Choose End Time for how long you want it to display
- Choose the Group(s) you in which you want it to be displayed
- Click Accept



The Tactical Graphic will display on the map.

### 7.10.3 Hook a Tactical Graphic

Click on or close to the first point to Hook the Tactical Graphic. A Blue circle will appear around the initial point.



This Hook Readout displays the following:

- Kind of Drawing
- Type of TG
- Which User created the TG
- Source
- Originator
- Label
- Symbol Type
- Start Time
- End Time
- Latitude
- Longitude

### 7.10.4 Delete a Tactical Graphic

To delete a Tactical Graphic, click the Delete icon in the menu. A list of your tactical graphics will appear. Select the Tactical Graphic that you want to delete from the list, and it will become highlighted on the map with a white line. Press the DELETE button and the Tactical Graphic will be removed from the map.

## 7.11 Pair

You can Pair (2) Tracks or Sites to get either a range between them or – when available – an Intercept vector.

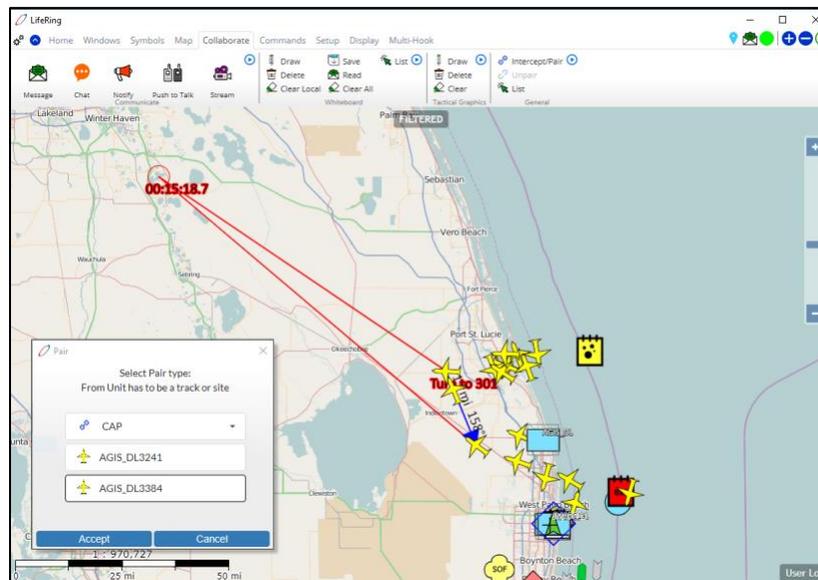
To Pair Tracks or Sites.

- Click the Intercept/Pair button
- Use the Pull down to choose the Pair Status

Note: The difference is how they are labeled, they all function the same.

- Hook a From Track or Site
- Hook a To Track or Site

This will display an azimuth line between the (2) symbols and – when available – an Intercept vector.



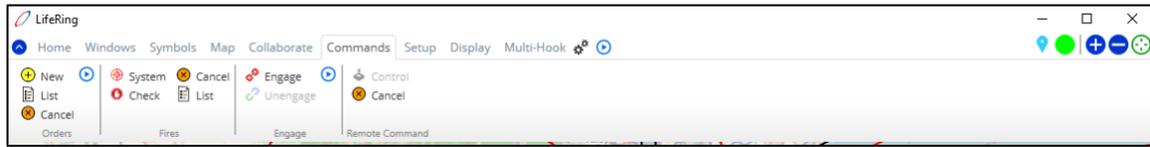
## 7.12 Unpair

To Unpair any (2) symbols, click on the first symbol in the pair to hook the symbol. The Unpair menu icon will become active allowing you to click on it to unpair the (2) symbols.

## 7.13 List

Click the List button to see any active Pairs you have, You can select them and click delete to clear them.

## 8 COMMANDS



### 8.1 Orders

The ORDER function forces an alert to be displayed on the screens of all receiving Users. It is used in situations where the message or command is of highest priority and acknowledgement of receipt of the message or command, coupled with the Users ability to comply, is desired.

#### 8.1.1 New

By selecting the NEW icon under ORDERS the System Alert screen will open. The System Alert screen enables the operator to type in a text order coupled with a User's pre-formatted order type if desired.

To create a Text ORDER:

- Select NEW
- Hook the User to send an ORDER to, or do not hook any and the ORDER will be sent to everyone.
- Enter the ORDER Text
- Select INFO, HOLD, ATTACK, or WITHDRAW
- Select OK

To create an Audio ORDER:

- Select NEW
- Hook the User to send an ORDER to, or do not hook any and the ORDER will be sent to everyone.
- Click and hold the microphone icon and speak into your device mic and record an audio order
- Select INFO, HOLD, ATTACK, or WITHDRAW
- Select OK

LifeRing devices receiving an order, suspend all nonessential operation until the User responds to the order. LifeRing will continue to transmit and receive data, but the LifeRing User is unable to continue with any other function until responding to the order. Minimizing LifeRing or even terminating LifeRing will not bypass the order. The receiving Users are provided three possible responses: HAVECO (Have Complied), CANTCO (Cannot Comply) or WILCO (Will Comply).

#### 8.1.2 List (List Orders)

The List feature allows headquarters to view the orders he/she has issued and the responses. To get the List select the LIST icon under ORDERS, the List displays all orders and responses. Negative responses, (CANTCO) are displayed in red text and Users who have responded that they have complied or that they will comply (HAVECO, WILCO) are displayed in green.

Click on the Command type and a message box will appear with:

- The Order number
- The Order message
- The Source
- The type of Order (INFO, HOLD, ATTACK, WITHDRAW)
- The time the Order was sent out
- The Users it was sent to
- Their Response
- The State of the Response

Number	Alert	Source	Command	Time	User	Response	State
2546	TEST	AGIS	INFO	21:42:26			
				21:42:25	AGIS_DL		RCVD
				21:42:31	JMAAND1	HAVCO	RESPONDED
				21:42:38	JMAWEB	CANTCO	RESPONDED

### 8.1.3 Cancel

To cancel an issued order, select the Cancel icon under Orders and a list of all orders are displayed. Highlight the alert to be canceled and select the delete button. A notifying message is transmitted to all Users informing them to cancel the specified command.

When an Order is cancelled, all Users that had received the Order will display an acknowledgment screen explaining that the Order has been cancelled. The exception is that the participating Users are only offered the option to acknowledge receipt of the cancellation. Cancel orders and all acknowledgements are displayed on the List Screen in conjunction with the original order.

## 8.2 Fires

The Call for Fire feature is available for those who are authorized to have such capability.

## 8.3 Engage

You can Engage a Site to a Hostile Marker or Track to get an azimuth line with Range and Bearing between them.

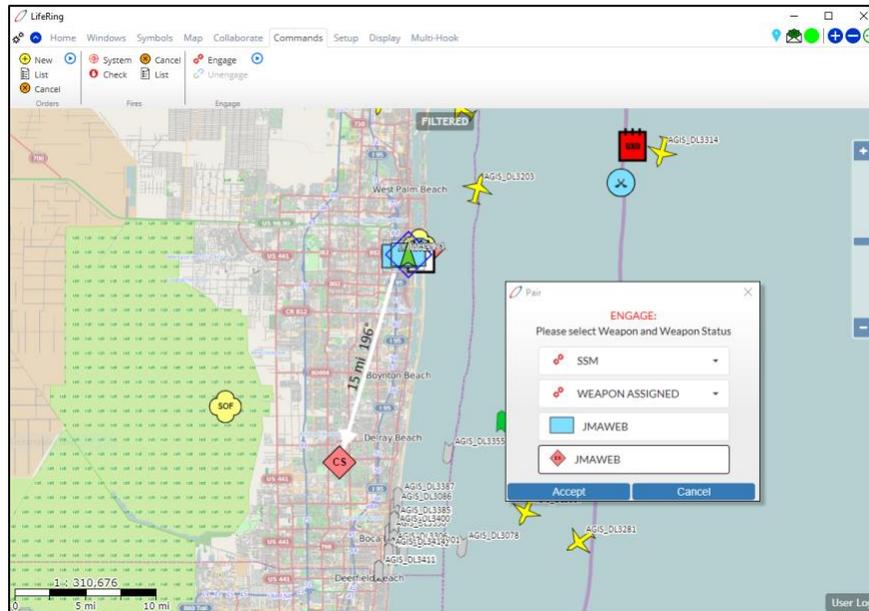
To Engage a Site:

- Click the Engage button
- Use the Pull down to choose the Weapon Type
- Use the Pull down to choose the Weapon Status

Note: The difference is how they are labeled, they all function the same.

- Hook a From Site
- Hook a To Hostile Track or Marker

This will display an azimuth line between the (2) symbols and – when available – an Intercept vector.



## 8.4 Weapon Command

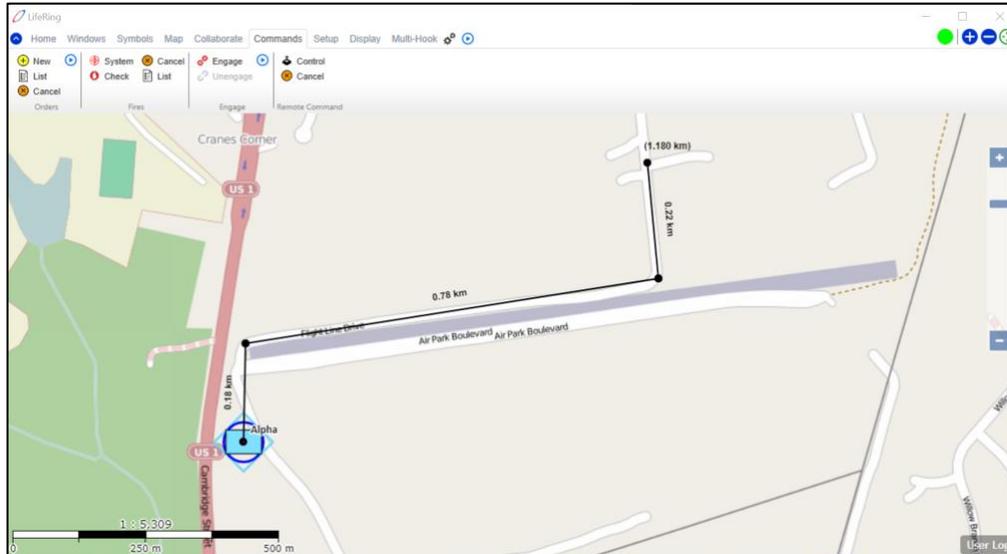
Allows you to control the movements of an UGV from the LifeRing display

- Click to add a Waypoint to the map.
- Click again to add another Waypoint and it will create a straight-line segment
- Click control to have the UGV follow the path of the line segments
- PTZ (Pan-Tilt-Zoom) is for controlling a camera on a UGV or UAV. Not enabled on the evaluation server.

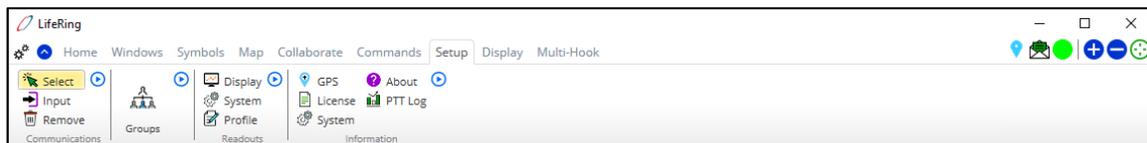
## 8.5 Remote Command

Allows you to control the movements of an UGV from the LifeRing display

- Click to add a Waypoint to the map.
- Click again to add another Waypoint and it will create a straight-line segment
- Click control to have the UGV follow the path of the line segments
- PTZ (Pan-Tilt-Zoom) is for controlling a camera on a UGV or UAV. Not enabled on the evaluation server.



## 9 SETUP



### 9.1 Communications

The LifeRing Network is the sum total of all participating devices that are transmitting and receiving data through a LifeRing Server. Although the LifeRing Server is called a Server, it is really a central repository and conduit through which data flows. For this reason the LifeRing Server can run on most PC devices. The LifeRing Server is often run on a PC that is also running a version of LifeRing display right in the field.

To best visualize the AGIS LifeRing Network architecture think of a ship's wheel. The central hub of the wheel is the LifeRing Network Server. The spokes of the wheel are the communication media and the handles of the outer rim of the wheel are the LifeRing Users. LifeRing Users at the outer rim of the wheel communicate to the LifeRing Network Server through the communication media, (the spokes).

### 9.2 Select (Server Select)

Server Select displays a list of formatted TCP/IP Servers to choose from. To change Servers click on the SELECT and a drop down dialog box will appear.

The purpose of the SELECT is to easily transition between LifeRing Servers. Should the User wish to use a LifeRing Server that is not listed in the window that appears;

use of the INPUT function is required. This also gives the User an option to choose a failover Server. This means if you lose communication with the Server (e.g. Server is destroyed or the Server's communications go down) you will automatically connect to the Server listed as a secondary Server.

### 9.2.1 Input

To change LifeRing network Servers click or tap on the SERVER button. Options for Server Select and Server Input will appear.

The INPUT feature allows the User to change to a Server that they have not previously been connected to by typing the exact IP and Port of the Server.

From this menu, Users can also change to use UDP Client/Server by choosing from the protocol dropdown box. LifeRing can also be set up to use UDP Broadcast.

To set up TCP/IP Client/Server:

- Press Input from SETUP Submenu
- Enter the desired IP Address and Port
- In the dropdown list, select TCP
- Select OK

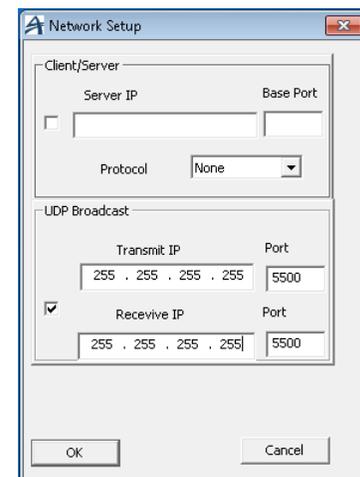
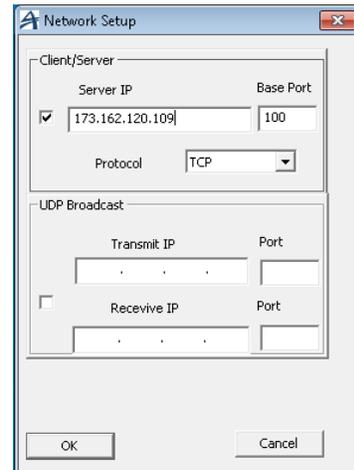
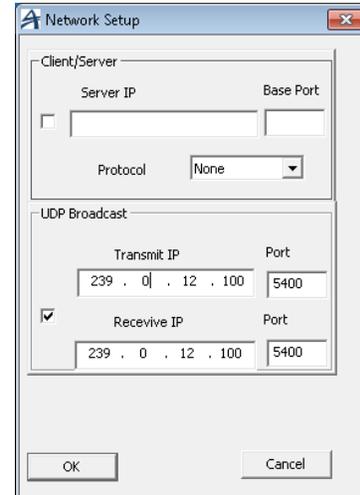
To set up UDP Client/Server:

- Press Input from SETUP Submenu
- Enter the desired IP Address and Port
- In the dropdown list, select UDP
- Select OK

To set up UDP Broadcast:

- Press Input from SETUP Submenu
- Uncheck the Client/Server Check box
- Check the UDP Broadcast Check Box
- Enter the desired Transmit and Receive IP and Ports e.g.
- Receive IP: 255.255.255.255 Port: 5500
- Transmit IP: 255.255.255.255 Port: 5500
- Select OK

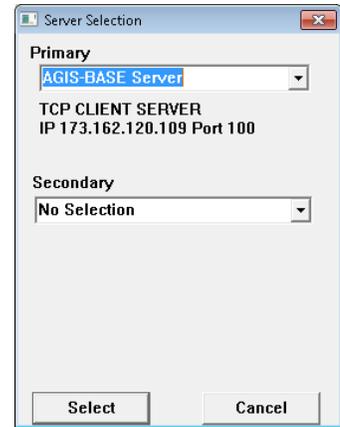
Note: UDP Broadcast may be used in conjunction with the LifeRing Server. This allows Client/Server Users to share the Common Operational Picture with UDP Peer to Peer Users. To set up the



LifeRing Server to bridge these two types of clients, please refer to the LifeRing Server Installation Manual.

To set up UDP Multicast:

- Press Input from SETUP Submenu
- Uncheck the Client/Server Check box
- Check the UDP Broadcast Check Box
- Enter the desired Transmit and Receive IP and Ports e.g.
- Receive IP: 239.0.12.100 Port 5400
- Transmit IP: 239.0.12.100 Port 5400
- Select OK



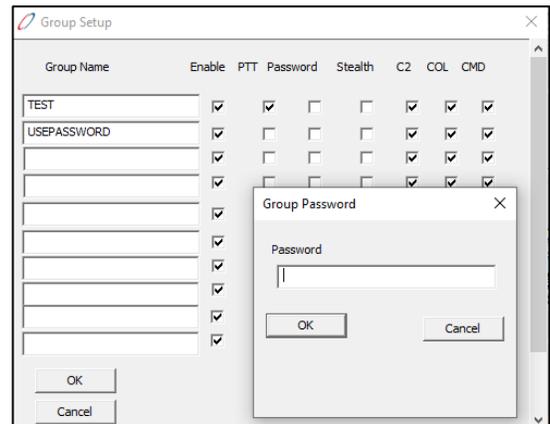
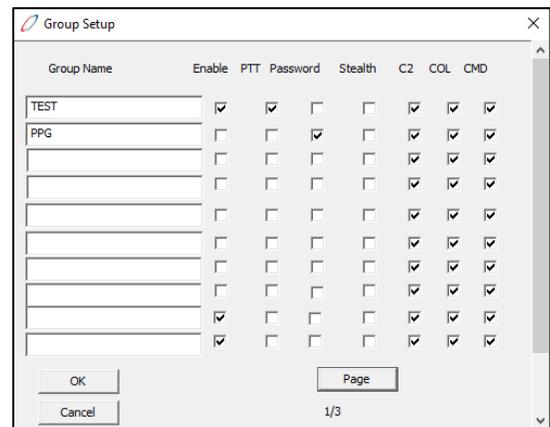
Note: UDP Multicast may be used in conjunction with the LifeRing Server. This allows Client/Server Users to share the Common Operational Picture with UDP Peer to Peer Users. To set up the LifeRing Server to bridge these two types of clients, please refer to the LifeRing Server Installation Manual

### 9.3 Groups

LifeRing Group Associations are segregated groups of Users operating within the LifeRing Network. When a LifeRing User first joins the LifeRing Network, they are placed in the “TEST” group. They communicate with anyone in the TEST group. LifeRing Users can then create a LifeRing Group Association by entering the keyword assigned to that specific Group, (i.e. Katrina).

TO CREATE/JOIN A GROUP:

Enter the Group name. Be sure to spell it exactly as other LifeRing Users, or you will create a new group with a similar name. Group names can be up to 20 characters long and the system supports up to 30 groups.



Check the Enable box to activate the group and to accept calls. If enabled is not checked, the group will not be enabled and anything that is checked for the group will not be used by LifeRing.

Check the PTT box to enable Push-To-Talk in this group.

Check the Password box to password Protect this

Group. Password can be up to 30 characters long.

Check the Stealth box and no other Users in the selected group will be able to see you or anything you add to the map. You will still see everyone in the group along with their created symbols, geo-fences, and Whiteboards. CHAT and Messages will still be received as normal.

Choose which data to be displayed

- If C2 is checked, only the essential information is displayed. This includes symbols on the map and their attachments.
- If COL (Collaboration) is checked, then CHAT, TEXT & PHOTO Messages, and Whiteboards are displayed.
- If CMD is checked, then ORDERS can be received.

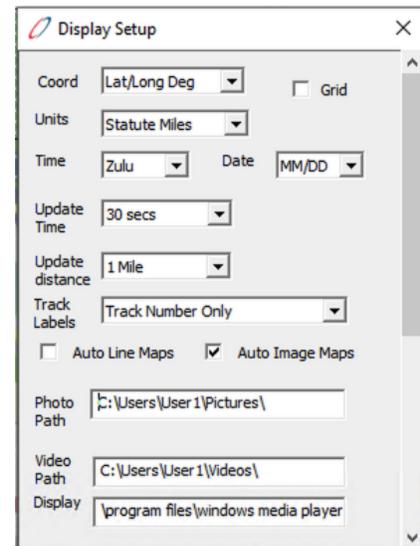
## 9.4 Readouts

The Readouts section contains the options of Display Setup, System Setup, and User Info Setup.

### 9.4.1 Display

The Display feature enables the PC LifeRing User to configure LifeRing coordinate display and update rates on the move. The LifeRing User can also configure LifeRing to:

- Display coordinates as Lat/Long Degrees, Lat/Long DNS, MGRS or UTM.
- Display the MGRS grid (only available when MGRS coordinates are set)
- Display in statute miles, Metric or Nautical and can change the LifeRing update distance from 1/2 mile to 1 mile to 2 miles.
- Have an UPDATE rate of every thirty seconds, one minute, five minutes or ten minutes. Each LifeRing User reports its position and status at an established time interval. Reporting intervals are configurable at the User level and can be changed. Any time a LifeRing User changes the reporting interval LifeRing informs the other Users of the interval, change. Each LifeRing Users device expects to receive data from the other Users devices at specific times based on their reporting interval.
- Display the local unit time or Zulu/Universal time using the LifeRing Display menu.
- Display Marker Labels with Marker Numbers Only, Marker Name Only, or Best Fit
- Decide whether to request Line Maps or Image Maps from the Message Server. If you are only planning to use one, deselect the other. When one is deselected, the client will not add the map request to the queue. This will save bandwidth by never transmitting unused maps.
- Raster Source, Raster Type, Source Display and Type Display are legacy settings to support clients who have existing stores of georeferenced tif sources that were once common map types.



(In addition to the configuration functions the DISP screen serves as a configuration screen that provides the ability to create paths for Photographs, Videos, etc. The configuration of these paths is important because it determines where LifeRing will go to access these files.)

### 9.4.2 System

The display window allows more system configurations for the Server to.

GPS Port - The physical or virtual port where LifeRing will find NEMA GPS data

GPS Baud – Manage the Baud rate.

Video Source – Enter external Video Source if needed.

Role: The default Role is User. Administrator, Commander, Developer, Superuser, Simulator are Roles that must be enabled by your Server Administrator.

Role Parameters: Displays the permissions for each Role.

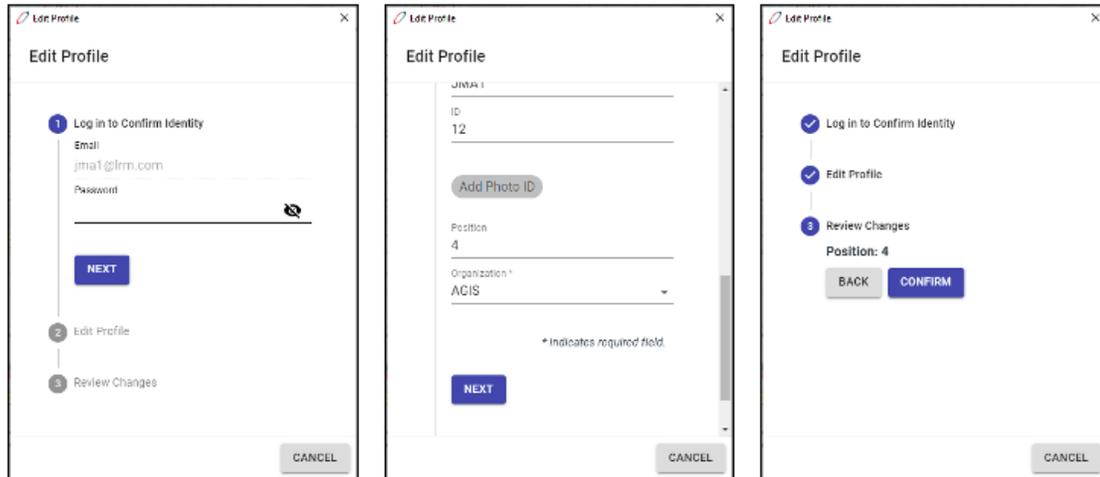
Tether - Tethering is for use on ships where locations on the map are relative to you and not a fixed GPS coordinate. (For more information on Tethering, please see the Administrator's manual)

Try Communications - The Try Communications check box is a function that enables the User to discontinue his devices attempts to establish communications. LifeRing is instructed to continuously attempt to establish connectivity if it is unable to find an IP socket. Should LifeRing determine that the flow of data has been disrupted, it is configured to break down the IP connection and re-establish a new one. The "Try Communications" box can be unchecked if the LifeRing User is aware that an IP connection is not possible. This action will stop LifeRing from continuously interrupting the screen in attempts to establish a connection.

Send Voice Alert - LifeRing is configured to cause other Users User devices to relay an audible announcement upon the receipt of a message. Obviously, a User that doesn't want to receive an audible announcement can silence his device by lowering the volume. Should a User wish to silence the delivery of an audible announcement to another User the Send Voice Alert box should be unchecked.

### 9.4.3 Profile

The Profile feature enables the LifeRing User to edit the information they entered during registration. You can update anything except your email account.



## 9.5 Information

These sections control and provide information about how LifeRing communicates with the Server and other LifeRing Users. Each of these features gives the LifeRing Users information about the LifeRing software they are currently using.

### 9.5.1 GPS

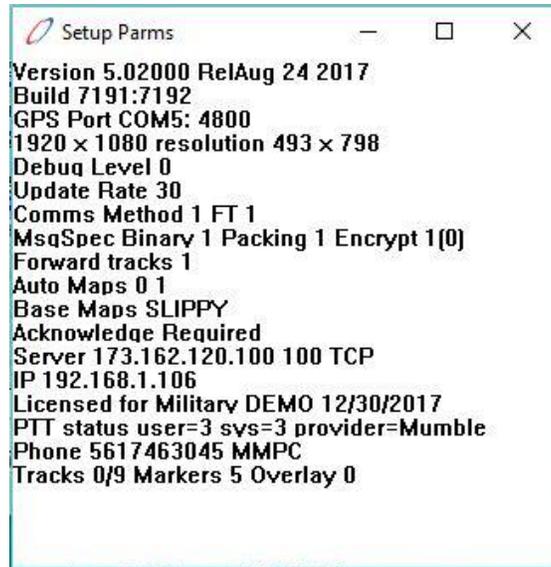
The GPS button displays a graphic illustration to rate the number and signal strength of the satellites.

### 9.5.2 License

The License icon causes the license Type, Telephone Number, License Key, and Expiration to display.

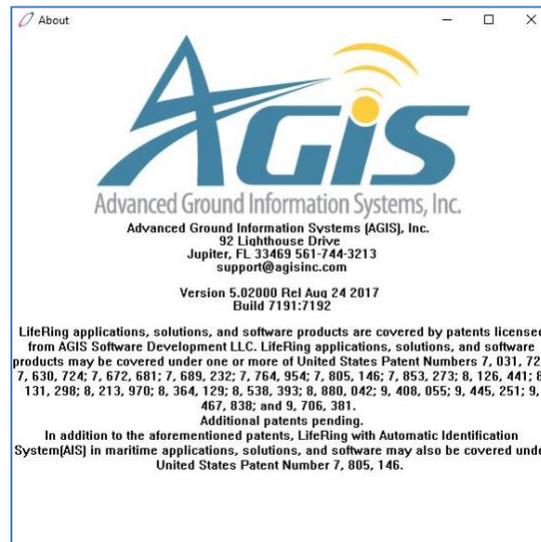
### 9.5.3 System

The System icon brings up a window that gives specifications about your software. Pressing the "S" key on a keyboard also causes the display of the Information Screen.



#### 9.5.4 About

The About icon brings up a window that gives you contact information for AGIS, Software Development LLC, Patent Information and the version of LifeRing you are using.



#### 9.5.5 PTT Log

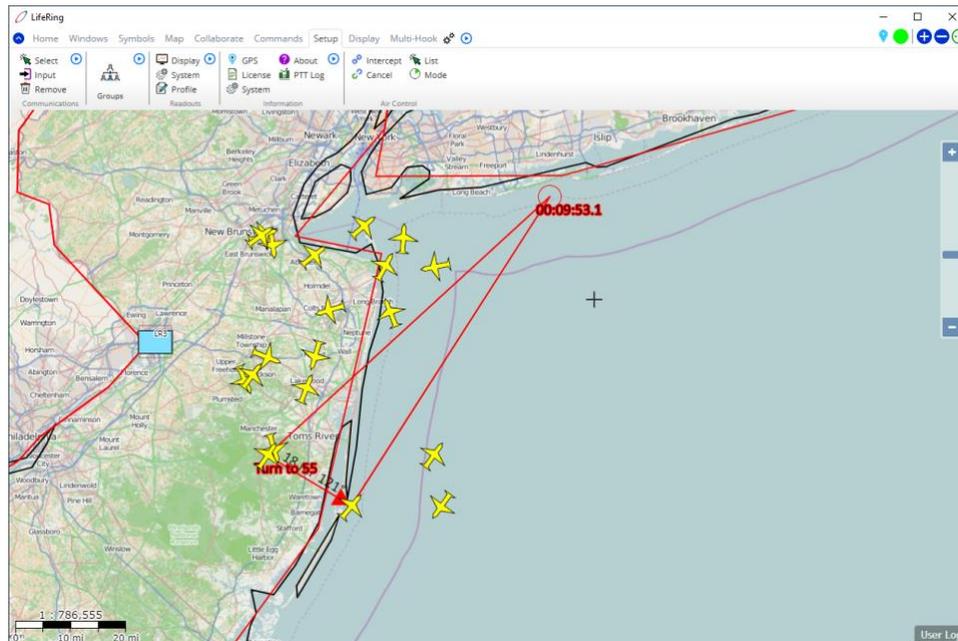
Shows you your PTT Connection Status during your session

## 9.5.6 Intercept

You can show an Intercept vector between (2) Tracks

- Click the Intercept button
- Hook a From Track
- Hook a To Track

This will display an azimuth line between the (2) symbols and – when available – an Intercept vector.



To clear the Intercept vector drawing:

- Hook a From Tack
- Click the Cancel button

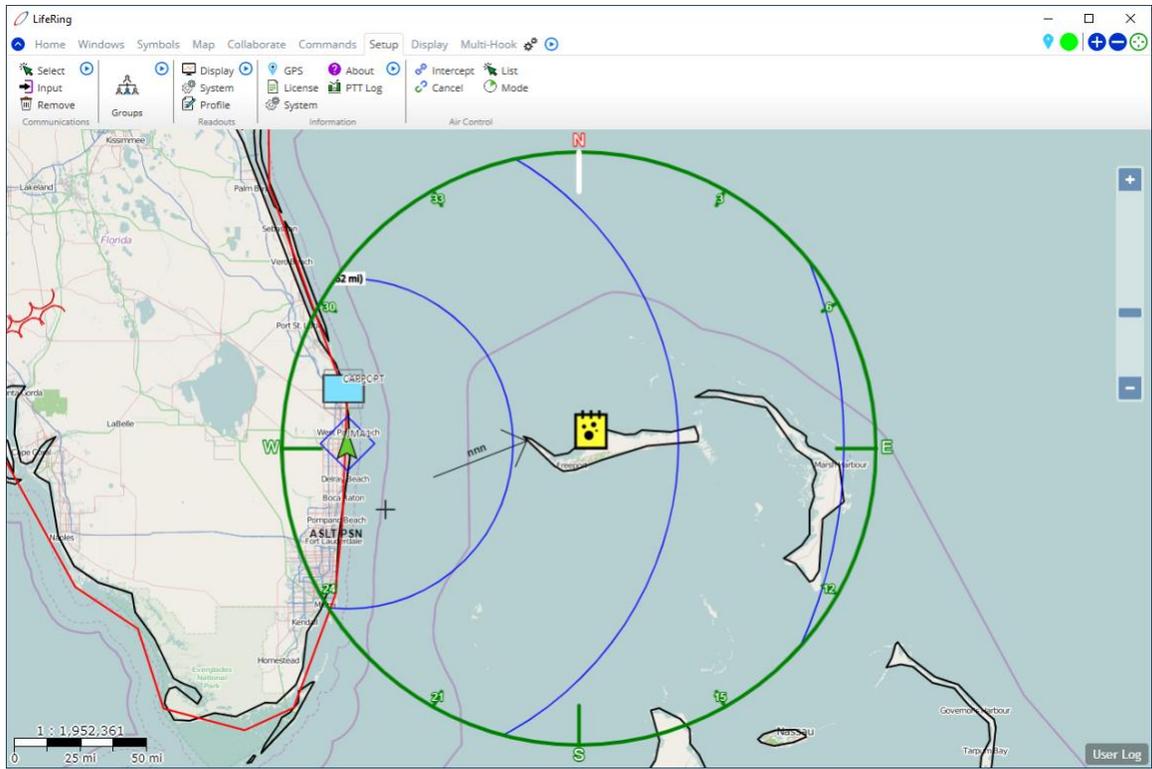
or

- Click the List button
- Select the Intercept names from the list and click Delete

## 9.5.7 Mode

You can display a radar range around your user symbol with intersecting range rings

- Hook your user symbol
- Click the Mode button

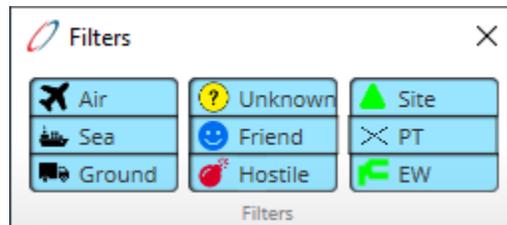


## 10 DISPLAY

This section controls what content is displayed on the map.

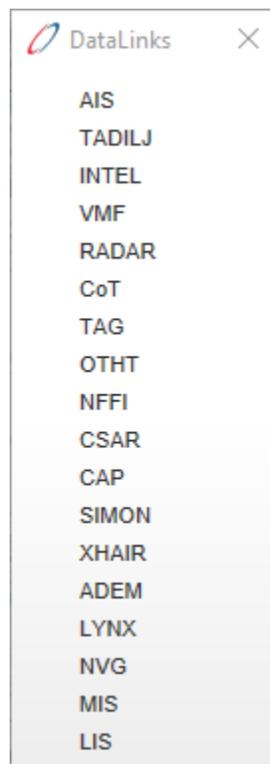
### 10.1 Filters

This tool allows you to toggle on or off the display of symbols on the map based on MILSTAND 2525 designators of Air, Ground, Sea, Unknown, Friend, Hostile, Site (Other User's Symbols), PT (Points) and EW (Electronic Warfare).



### 10.2 Datalinks

This tool allows you to toggle on or off the display of symbols generated from datalinks. The Datalinks must be present for the name to be active and able to be toggled on/off.



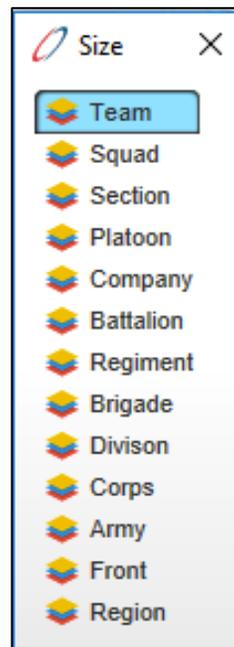
### 10.3 Overlays

This tool allows you to toggle on or off the display of symbols generated from overlays generated by Tactical Graphics.



### 10.4 Size

This tool allows you to toggle on or off the display of symbols based on echelon. If you select "Company" then you will see all symbols designated as Company or below.



## 10.5 Order of Battle

### 10.5.1 Organization

This window is populated from data entered in the Symbol Section in the Size Window and the Unit field. (section 4.3)

### 10.5.2 Command

This window is populated from symbols paired. (section 6.7)

### 10.5.3 Associate

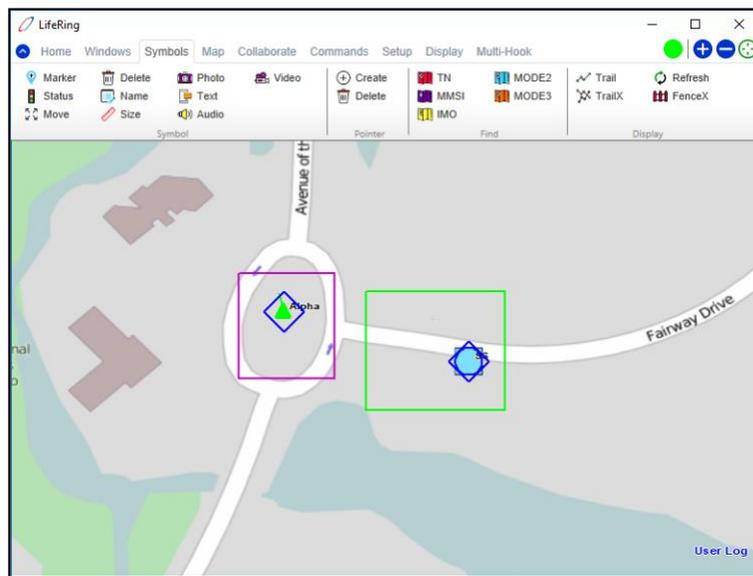
You can ASSOCIATE (2) marker symbols.

Click the Associate menu icon. Pull down the type menu and select Associate. Click on a Marker symbol on the map. The name of the Marker will display in the “from” field. Click on another Marker symbol. . The name of the Marker will display in the “to” field.

This will display an azimuth line between the (2) symbols with a range and bearing.

## 10.6 GeoFence

LifeRing PC software uses Geo-Fencing to alert the PC LifeRing User when designated areas are violated by either the entrance or exit of units into or from the designated area.



### 10.6.1 Enter (Entrance Geo-Fence)

The Enter Fence is a Geo-Fence that alerts the PC LifeRing operator when a unit enters a designated area drawn on the LifeRing main map display. To create an Enter Fence, click on the ENTER icon located in the FENCE menu. Click and drag on

the LifeRing Main Map to draw a square encompassing the area to be protected. The Enter Fence is represented by a purple square.

A marker symbol that vacates an exit fence will set off a “Fence cross alert” and will continue to flash even when it returns to the protected area.

### 10.6.2 Exit (Exit Geo-Fence)

The Exit Fence is a Geo-Fence that alerts the PC LifeRing operator when a unit exits a designated area drawn on the LifeRing main map display.

To create an Exit Fence, click on the EXIT icon located in the FENCE Menu. Using your mouse or stylus, click on the LifeRing main map and pull a square encompassing the area to be protected. The Exit Fence is represented by a green square.

A marker symbol that vacates an exit fence will set off a “Fence cross alert” and will continue to flash even when it returns to the protected area.

### 10.6.3 List (List Geo-Fences)

The DELETE allows the creator of a Geo-Fence to remove geo-fences. To cancel a fence click on the DELETE button and select which fence you want to remove by clicking on it in the new window that opens “GEO BOX LIST,” then click on delete and it will be removed from LifeRing.

### 10.6.4 Delete (Delete Geo-Fence)

The DELETE allows the creator of a Geo-Fence to remove geo-fences. To cancel a fence click on the DELETE button and select which fence you want to remove by clicking on it in the new window that opens “GEO BOX LIST,” then click on delete and it will be removed from LifeRing.

### 10.6.5 Clear Alert

This removes the Alert from the user symbol. Hooks the symbol that generated the fence crossing alert. Click the Clear Alert icon.

## 10.7 Misc

The Misc section covers the display of the MAP, allowing Users to change the map background, direction of the map heading and clear the map of markers/symbols.

### 10.7.1 Night

The Night icon changes the map background from light to dark with one click. Click again to switch back from dark to light.

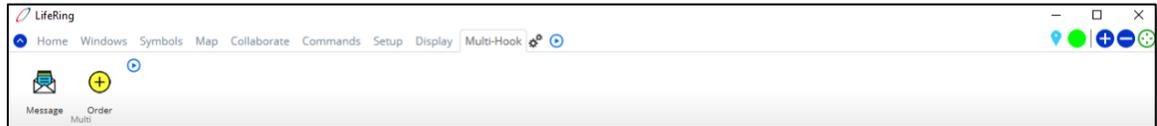
### 10.7.2 North

The North icon causes the map to be rotated in the direction of travel. This means that whatever direction you are going is the direction that will appear at the top on the display. An arrow will appear in the upper right-hand corner of the screen indicating the direction of North. By not selecting the North button the LifeRing User is choosing to have a North always UP map orientation.

### 10.7.3 Clear

The Clear button will clear your display of added markers and symbols you have created.

## 11 Multi-Hook



LifeRing's Multi-Hook menu allows the user to hook multiple users on the map at the same time. The user can then direct a Message, Chat or send Orders to the hooked users. Once the Multi-Hook menu item is selected, the top right corner of the tactical map will say "MODE MULTI HOOK" to indicate Multi-Hook is active. When selecting users, they will no longer have a blue circle around them, there will be a green square representing Multi-Hook. Hooking one user when another is already hooked, no longer unhooks the previously selected user. To leave Multi-Hook and go back to regular hook selection, select another menu item such as the Home item from the Main Menu.

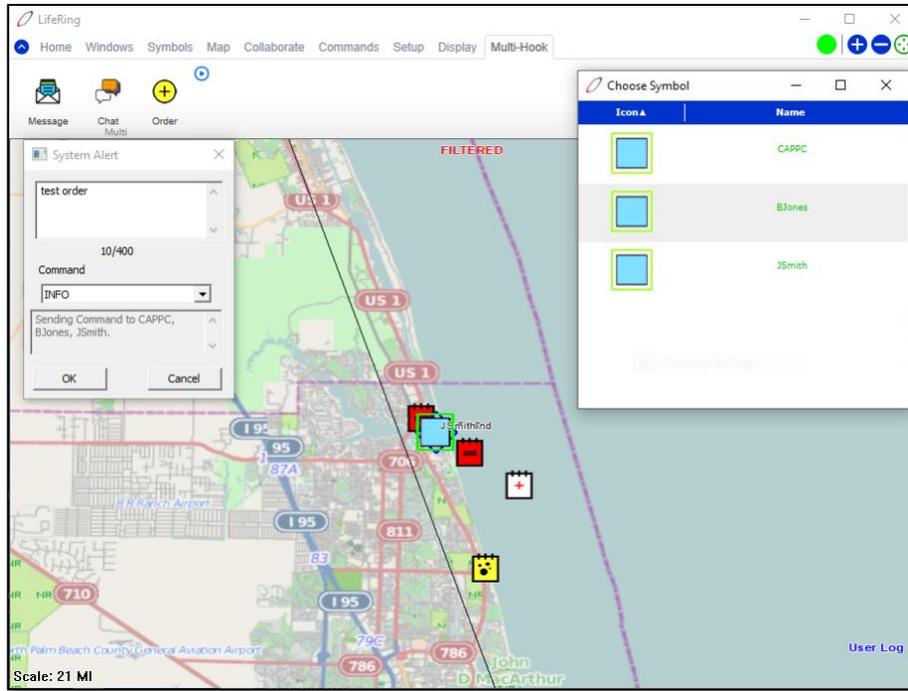
### 11.1.1 Message

The Message option will open a Message conversation window that includes the users that are hooked.

### 11.1.2 Orders

The Orders option will open an Alert window that will direct Orders to users that are hooked.

Type the Order into the text field and choose the Command type from the drop down. Click a User Symbol to Hook them and their User name will appear in the recipient window. Hook and select all the users you want to send the order to and click OK.



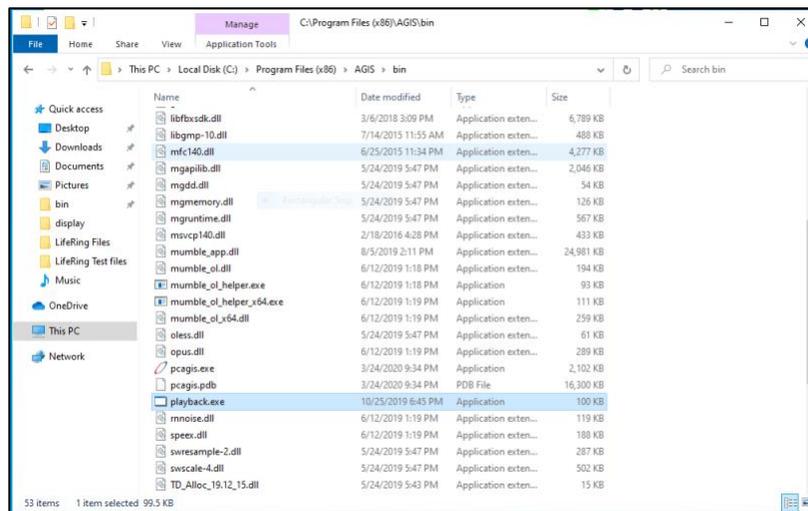


## 12 Play Back

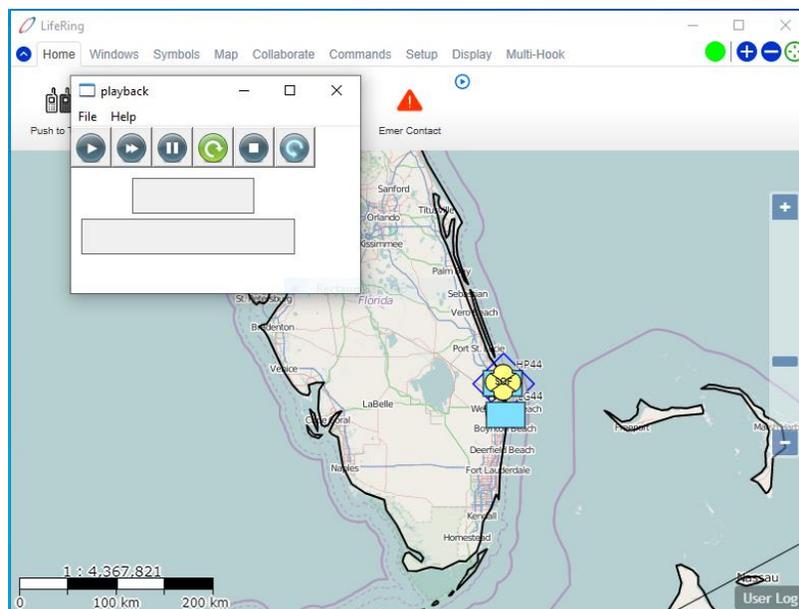
LifeRing stores all marker and track additions and movements as well as communications in 60 minute increments.

To view these recording, you need to open the Play Back application that is packaged with the LifeRing PC Client Installer. /

Open and Windows Explorer window and navigate to...  
**This PC / Local Disk (C:) / Program Files (x86) / AGIS / Bin /**  
 ...and double click on **playback.exe**

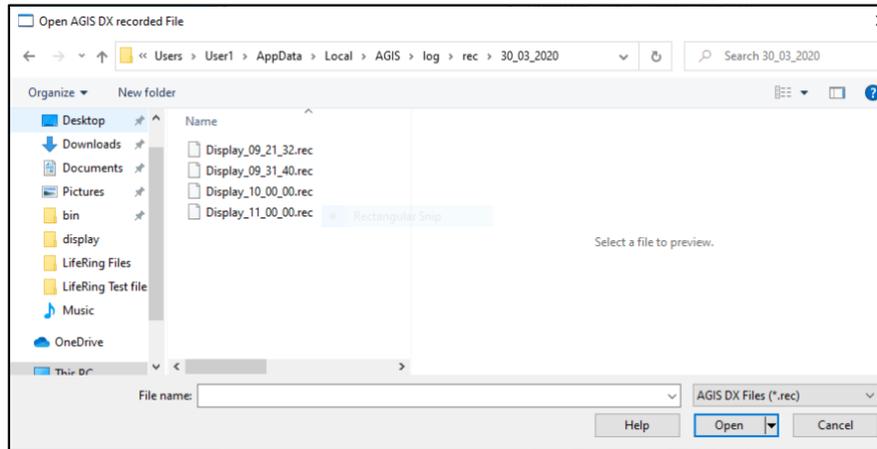


This will open the Play Back window on your desktop. Click File > Open

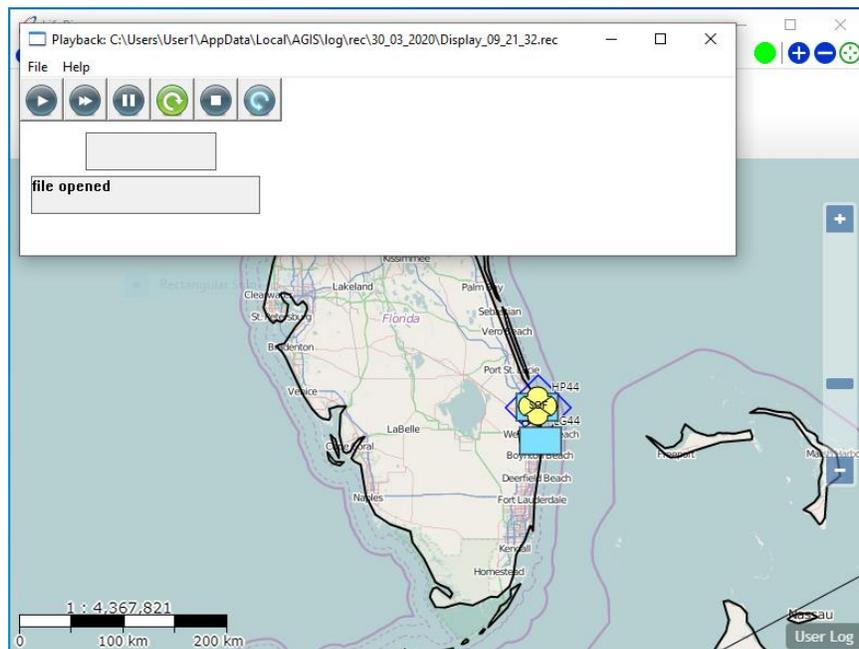


and navigate to...

**This PC / Local Disk (C:) / Users / Your User / AppData / Local / AGIS / Log / Rec / Date /**  
 ...and double click on the time/file you want to review.

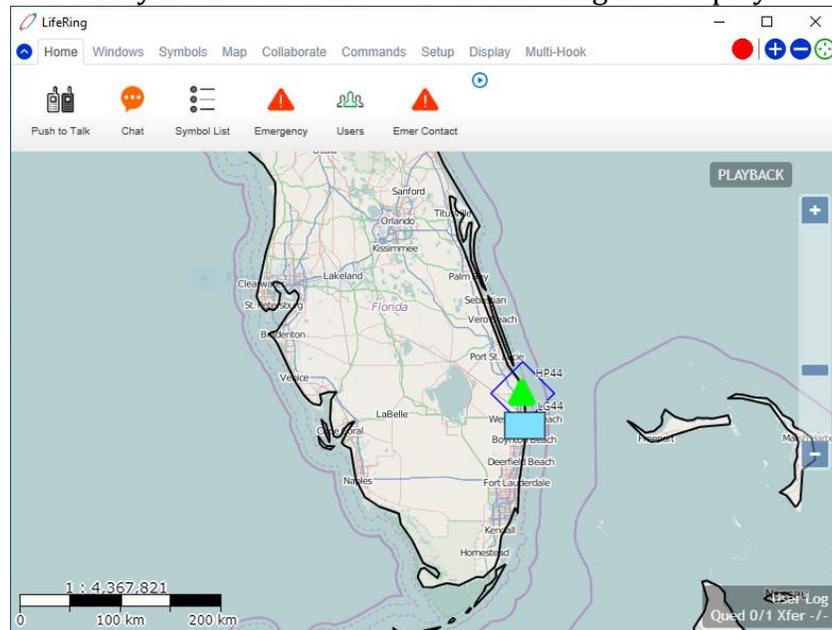


With the file selected, you have controls to PLAY, FAST FORWARD, PAUSE, LOOP AHEAD, STOP and LOOP BACK



Push PLAY and you'll see that your LifeRing screen will no longer be connected to the server and will display PLAYBACK mode in the top right of the screen. All the movements and actions you see on screen are now from the recorded file.

Hit STOP or close Play Back to reconnect to the LifeRing live display.



## 13 LIFERING END-USER LICENSE AGREEMENT

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**Location Information and Maps.** LifeRing obtains User's location information from their device's GPS or via manual entry. Such information may, from time to time, be inaccurate, incomplete, unavailable, or outdated. LifeRing utilizes OpenStreetsMaps for many of its mapping functions. OpenStreetMap is open data, licensed under the Open Data Commons Open Database License (ODbL). See [www.openstreetmap.org/copyright](http://www.openstreetmap.org/copyright). AGIS does not provide any warranties to accuracy or reliability of any location information or mapping information provided through LifeRing. LifeRing also provides the ability to use maps from many sources including customer provided maps.

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#### 6. THIRD PARTY INTERFACES

LifeRing may utilize, or contain links to, third-party databases and websites ("Third-Party Information") in connection with the provision of data or services to you. AGIS does not assume any responsibility for the Third-Party Information, and you expressly release AGIS from any liability Users with LifeRing's use thereof.

#### 7. SECURITY

AGIS has implemented and maintains reasonable physical and electronic security measures to protect the privacy and security of information collected from you, which are designed to limit unauthorized access thereto. While we use the foregoing security measures to protect your information, please note that no data transmitted electronically or stored and utilized for business purposes can be guaranteed to be completely secure. No security measures are perfect or impenetrable. We cannot guarantee that only authorized persons will view your information or that that information you share using LifeRing will not become publicly available.

#### 8. GOVERNING LAW

READ THIS SECTION CAREFULLY. IT REQUIRES YOU TO ARBITRATE ANY DISPUTES WITH AGIS AND LIMITS HOW YOU CAN SEEK RELIEF FROM AGIS.

YOU AGREE THAT, BY ENTERING INTO THIS AGREEMENT, YOU WAIVE THE RIGHT TO A TRIAL BY JURY OR TO PARTICIPATE IN A CLASS ACTION, COLLECTIVE ACTION, OR OTHER REPRESENTATIVE PROCEEDING OF ANY KIND. ALL CLAIMS UNDER THIS AGREEMENT MUST BE BROUGHT BY THE PARTIES' IN AN INDIVIDUAL CAPACITY AND NOT AS A CLASS MEMBER IN ANY CLASS ACTION, COLLECTIVE ACTION, OR GENERAL ACTION. YOU AGREE THAT THE ARBITRATOR MAY NOT CONSOLIDATE MORE THAN ONE PERSON'S CLAIMS.

You agree to resolve any claim, dispute, or controversy (excluding any AGIS claims for injunctive or other equitable relief) arising out of or in connection to this Agreement, or the breach or alleged breach thereof (collectively, "Claims"), by binding arbitration before a single arbitrator in accordance with the then existing Commercial Arbitration Rules of the American Arbitration Association ("AAA"), including the Optional Rules for EMERGENCY Measures of Protection. The arbitrator shall be a practicing attorney or retired judge with at least fifteen (15) years of relevant working experience. The arbitration shall be held in Palm Beach County, Florida unless otherwise mutually agreed upon at the time by the parties. The arbitration proceedings and arbitrator's award shall be maintained by the parties as strictly confidential, except as is otherwise required by court order or as is necessary to confirm, vacate or enforce the award and for disclosure in confidence to the parties' respective attorneys, tax advisors, and senior management and to family members of a party who is an individual. No demand for arbitration may be made after the date when the institution of legal or equitable proceedings based on such claim or dispute would be barred by the applicable statute of limitation, and all claims must be brought within one (1) year of the day that the claim arises, or otherwise be barred. The award rendered by the arbitrator shall include costs of arbitration, reasonable attorneys' fees and reasonable costs for expert and other witnesses, and any judgment on the award rendered by the arbitrator may be entered in any court of competent jurisdiction. The arbitrator is not authorized to award punitive or other damages not measured by the prevailing party's actual damages. Nothing in this section shall be deemed as preventing AGIS from seeking injunctive or other equitable relief from the courts as necessary to protect any of AGIS' proprietary interests.

Except as otherwise provided by the AAA, the arbitrator shall require exchange by the parties of: (i) the name and, if known, address and telephone number of each person likely to have knowledge of relevant information, identifying the subjects of the information, and (ii) non-privileged documents, including those in electronic form, that are relevant to the issues raised by any claim, defense or counterclaim or on which the producing party may rely in support of or in opposition to any claim, defense or counterclaim. The arbitrator shall limit such production based on considerations of unreasonable expense, duplication, and undue burden. These exchanges shall occur no later than a specified date within sixty (60) days following the appointment of the arbitrator. At the request of a party, the arbitrator may at his or her discretion order the deposition of witnesses. Depositions shall be limited to a maximum of three depositions per party, each for a maximum of four hours duration, unless the arbitrator otherwise determines. The arbitrator may allow such other discovery as he or she determines is reasonably necessary for a fair determination of the dispute. Any dispute or objections regarding discovery or the relevance of evidence shall be determined by the arbitrator. All discovery shall be completed within one hundred and twenty (120) days following the appointment of the arbitrator, unless the arbitrator otherwise determines.

By accepting this Agreement, you acknowledge that use of LifeRing involves an interstate or international commerce transaction. You also agree that: (a) this Agreement shall be governed by the laws of the State of Florida, without respect to its conflict of laws principles; (b) the application of the United Nations Convention on Contracts for the International Sale of Goods is specifically excluded from being part of this Agreement; (c) AGIS retains the right to seek injunctive or other equitable relief to prevent the actual or threatened infringement, misappropriation or violation of AGIS's patents, copyrights, trade secrets, trademarks, or other intellectual property or proprietary rights. This Agreement may not be transferred or assigned by you, but may be assigned by AGIS without restriction.

#### 9. MISCELLANEOUS TERMS

**Severability.** If any term, covenant, condition or provision of this Agreement is held by a court or arbiter of competent jurisdiction to be invalid, void or unenforceable, it is the parties' intent that such provision be reduced in scope only to the extent deemed necessary to render the provision reasonable and enforceable and the remainder of the provisions of this Agreement will in no way be affected, impaired or invalidated as a result.

**Entire Agreement.** This Agreement contains the entire agreement between the parties, and supersedes any prior proposal, representation, or understanding between the parties. This Agreement may only be modified by a written agreement accepted by both parties. All terms, conditions and obligations of this Agreement will be deemed to be accepted by Licensee upon installation of LifeRing.

No Legal Relationship. Nothing in this Agreement shall be interpreted to create a partnership, relationship, joint venture employee, agency, or franchise relationship between the parties hereto.

Indemnification. In the event that you violate any of these terms of this Agreement, you agree to indemnify, defend and hold AGIS, including its officers, directors, employees, agents, affiliates and partners harmless from any and all losses, liabilities, fines, penalties, costs or expenses (including reasonable attorneys` fees and reasonable expenses) arising therefrom.

## 14 CONTACT LIFERING SUPPORT

Your opinion and input is appreciated. Support is also available.

Please visit us at <https://www.agisinc.com>.

AGIS cannot test LifeRing with every computer device on the market. We will however, assist as best we can with the devices you have.