



Configure the SeaVision Interface

Lesson 2.2

07/01/2020

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Lesson 2.2 Learning Objectives

Upon successful completion of this lesson, the student will be able to:

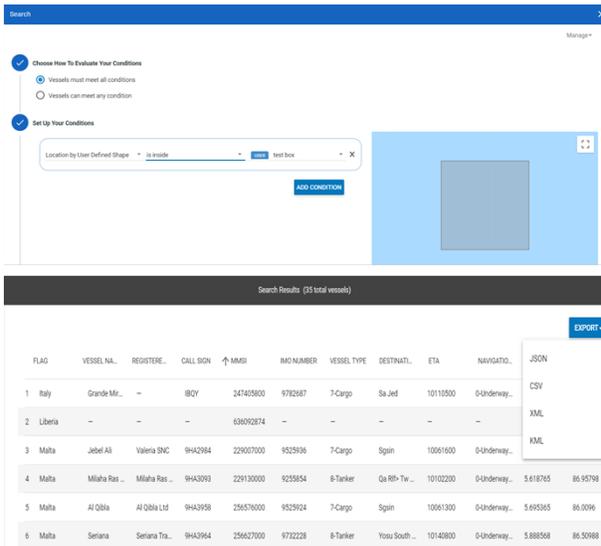
- Identify and configure the user interface to meet operational requirements
 - Searches
 - Chat/Messages
 - Map Menu (MY LAYERS - SHAPES, STATIC LAYERS, and MAP TOOLS)
 - Map Options (Map type, Custom views, Map Settings, Map Filters, Baseball Card Settings, and Exporting Vessels)
 - Dashboard (Rules, Alerts, Warnings, and Vessel Lists)





Search

- Searches provide the ability to execute a custom vessel query
- Searches can be saved and shared
- Results can be viewed on the map, exported, or saved to a vessel list



FLAG	VESSEL NA.	REGISTRE.	CALL SIGN	↑ IMO#	IMO NUMBER	VESSEL TYPE	DESTINATI.	ETA	NAVIGATIO.	EXPORT	
1	Italy	Grande M...	--	IBOY	247405800	9782687	7-Cargo	Sa Jed	10110500	0-Underway...	JSON CSV XML KML
2	Liberia	--	--	--	636092874	--	--	--	--	--	
3	Malta	Jebel Al	Valeria SNC	9HA2984	22907000	952936	7-Cargo	Spinn	10061600	0-Underway...	
4	Malta	Milaha Ras ...	Milaha Ras ...	9HA3093	22913000	925854	8-Tanker	Qa Rf- Tw ...	10102200	0-Underway...	5.618765 86.95798
5	Malta	Al Qbla	Al Qbla Ltd	9HA3938	22657600	952924	7-Cargo	Spinn	10061300	0-Underway...	5.695365 86.0096
6	Malta	Seriana	Seriana Tra...	9HA3964	22662700	972228	8-Tanker	You South ...	10140800	0-Underway...	5.888568 85.50988

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- Users are able to configure Search settings (Columns, Data Sources) before running a search
- Users can select which data sets the Search will be run against



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Search Cont.

Search Manage

✓ Choose How To Evaluate Your Conditions
 Vessels must meet all conditions
 Vessels can meet any condition

✓ Set Up Your Conditions
Vessel Type is 4X - High Speed Craft (HSC) X
ADD CONDITION



✓ Choose The Time Period To Evaluate
Vessel Age 6 hrs No Maximum

✓ Done!

SEARCH

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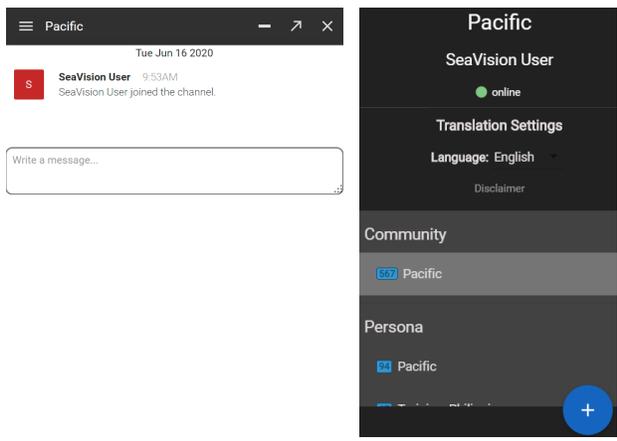
- A search in SeaVision may be specific enough to return one vessel or general enough to result in multiple matches
- Configure Searches:
 - Choose How to Evaluate Your Condition
 - Vessels must meet all conditions
 - Vessel can meet any condition
 - Set Up Your Conditions
 - Choose The Time Period to Evaluate
 - 1-24 hours
 - 1-30 days
 - No Maximum



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Configure Chat Channels

- Community Channel
- Persona Channels
- Direct Message (DM) Channels



Write a message...

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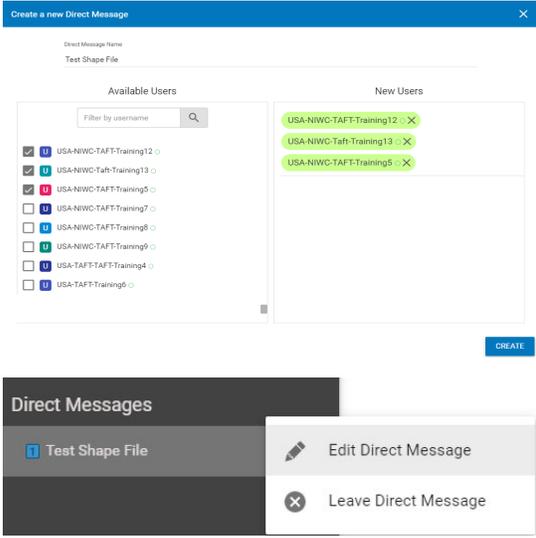
- Chat provides the ability to collaborate with other SeaVision users in a community and a persona. Channels are used to organize conversations across the community. Each community contains three types of channels:
 - Community Channels: Open to everyone in a community. When users are added to a community, they are automatically added to the Community Channel. When messages are posted in the Community Channel, they are visible to everyone in that community.
 - Persona Channels: For topics relevant to a persona and only visible to members of that persona. When users are added to a persona, they are automatically added to the corresponding Persona Channel.
 - Direct Message (DM) Channels: Private conversations among two or more people and only visible to members of the Direct Message. Any member of a Direct Message can add additional members. Members can choose to leave a Direct Message group at any time, but only SeaVision Admins can remove other members.





Messages

- Create a new Direct Message
 - Direct Message Name
 - Available Users
 - Create
- Direct Messages
 - Edit Direct Message
 - Leave Direct Message



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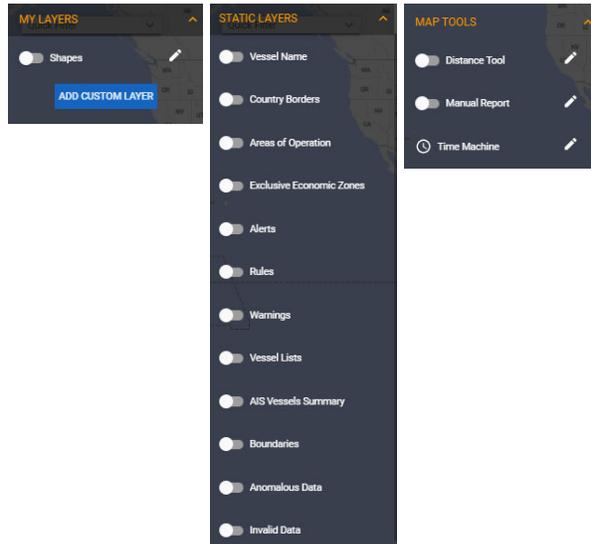
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- Sending messages and replying to messages are important ways to keep conversations active within Chat



Map Menu (MY LAYERS, STATIC LAYERS, MAP TOOLS)

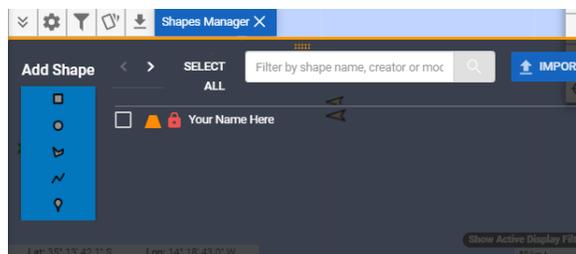
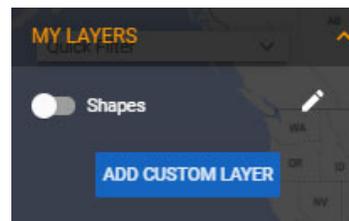
- MY LAYERS
 - Shapes
- STATIC LAYERS
 - Display various overlays on a map for quick visual reference
- MAP TOOLS
 - Distance Tool
 - Manual Report
 - Time Machine





User-Defined Shapes

- Shapes enable you to select and highlight a region of interest to track vessel activity
- User-defined shapes designate a geospatial area for Searches, Rules, and/or Alerts
- Supported Shape types include rectangle, circle, polygon, polyline, and marker



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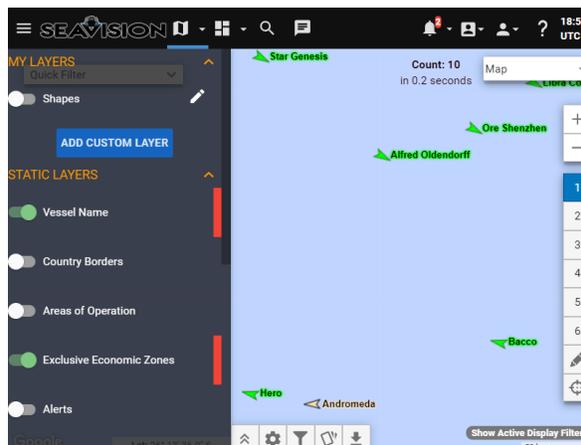
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- User-defined Shapes can be shared to a Persona or Community
 - SeaVision supports exporting and importing shapes in KML, JSON, and CSV formats
- Additionally, users can add Shape notes, which may also be shared to a Persona or Community



STATIC LAYERS

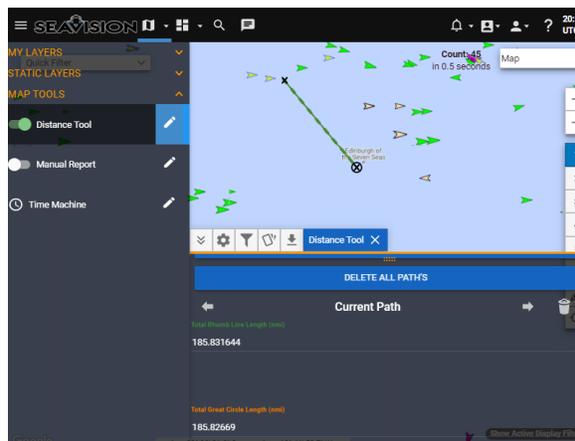
- Customizable Map View
- Display Map Overlays - Toggle On/Off





MAP TOOLS

- Distance Tool
 - Users can create a Rhumb Line (RL) or Great Circle (GC) to measure the distance between two or more points



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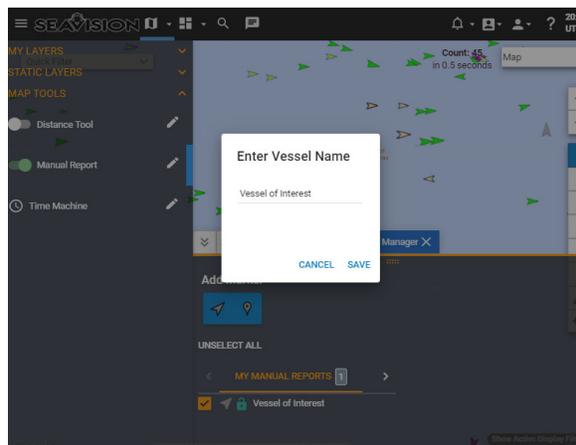
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- Perform time and distance calculations
- Create single or multi-segment lines
- Attach line segments to any vessel icon on the SeaVision map
- Edit individual line segments



MAP TOOLS

- Manual Report
 - Report the location of a vessel or incident to display on the map



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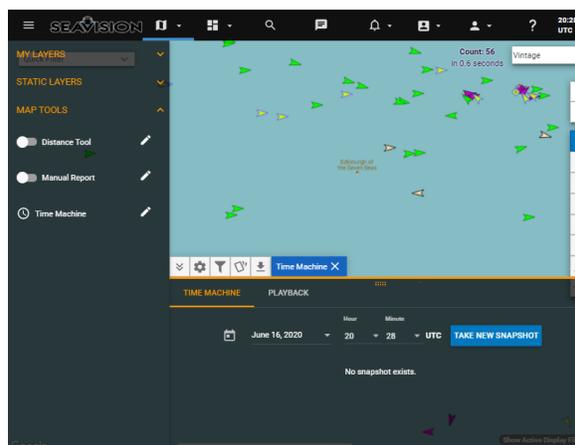
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- For both vessels and incidents, users must specify the date/time and position for the marker to be displayed on the map
- Specify heading, course, speed, and enable the marker to update based on dead reckoning
- Share to a Persona or Community
- Add notes to the manual report which may also be shared to a Persona or Community



MAP TOOLS

- TIME MACHINE
 - Snapshot of all AIS traffic for a specific date and time

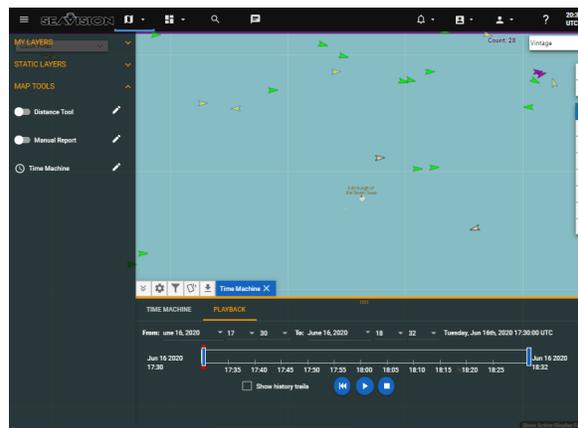


- A snapshot of all AIS traffic for specific date and time in UTC
- Data is available for up to one year prior to the current date and includes the previous 4 hours from the time selected



MAP TOOLS

- **PLAYBACK**
 - Animated playback of vessel's historical positions and movements over time



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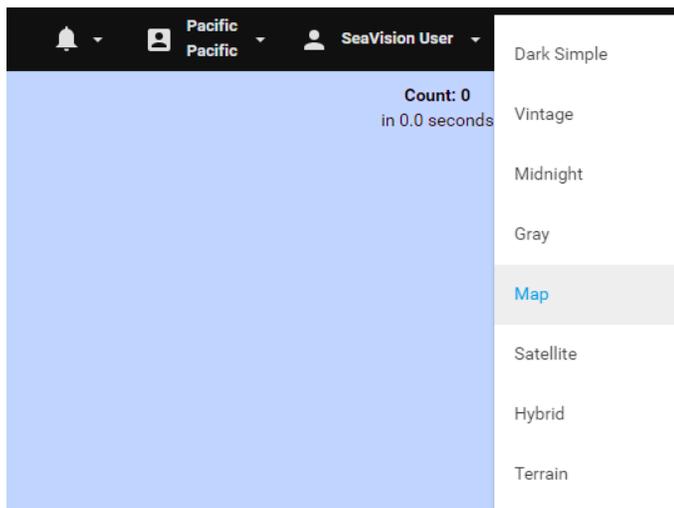
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- SeaVision **PLAYBACK** gives users the ability to view an animated playback of historical vessel positions over a period between 1 hour and 30 days
- Users are given the ability to scroll through selected time periods to view and analyze vessel data of the selected geographic area
- SeaVision **PLAYBACK** data is available for up to one year prior to the current date and can be used in conjunction with vessel filters, quick filters, and extended map filters



Map Types

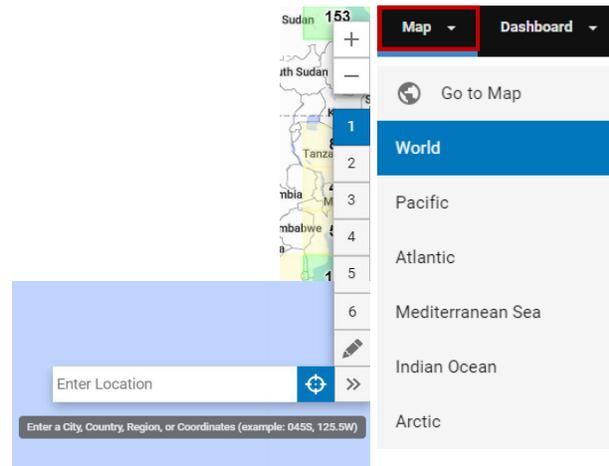
- Map Types
 - Dark Simple
 - Vintage
 - Midnight
 - Gray
 - Map (Default)
 - Satellite
 - Hybrid
 - Terrain





Custom Views and Jump to Location

- Custom Views
 - Six custom views may be set
 - Filters/zoom level saved
 - Quick access using Go To Map
- Jump to Location
 - Cities/Ports
 - Countries
 - Regions
 - Coordinates



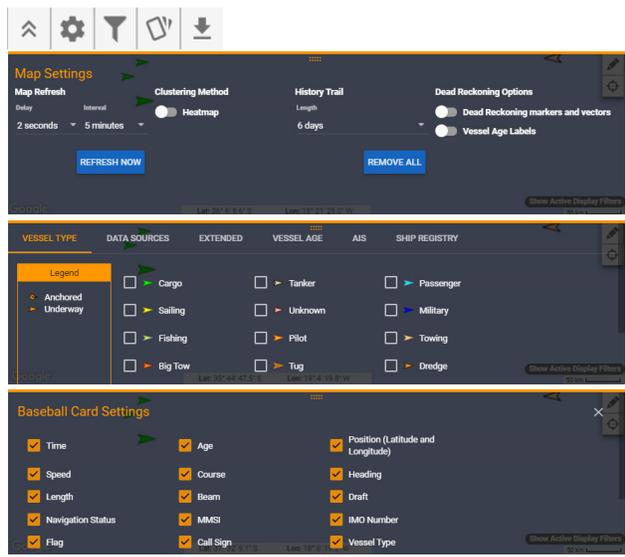


Map Options

- Map Settings
 - Map Refresh
 - History Trail
 - Dead Reckoning
- Map Filters
- Baseball Card Settings
- Export Vessels





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- Map Settings

- Map Refresh

- Delay: adjust the time between pan movements before reloading the page from 0 to 10 seconds
- Interval: update the current locations of all vessels on the Map display. The rate can be set from 1 to 10 minutes

- History Trail Length

- Change the amount of time (1 to 90 days) of viewable historical vessel track data that is displayed on the Map

- Dead Reckoning

- A vessel's estimated position based on last AIS position, course, and speed



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Map Filters

- VESSEL TYPE
- DATA SOURCES
- EXTENDED

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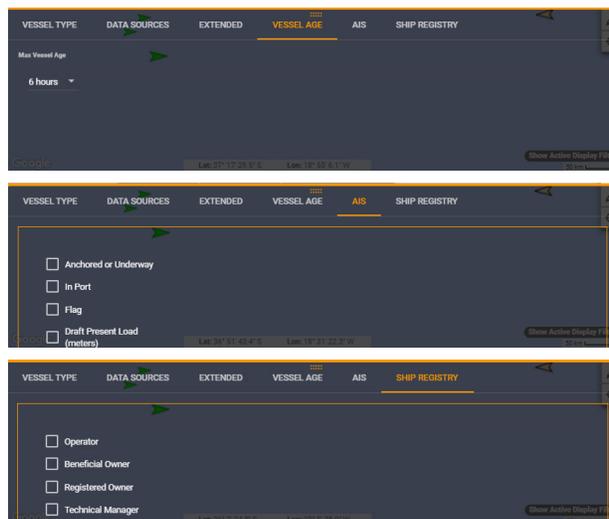
- Map Filters

- The Vessel Filters tab lists a variety of vessel-related filters within SeaVision, as well as several overlays that can be displayed on the Map. Users can run multiple filters simultaneously and can show vessels that match select criterion, user-defined rules and/or alerts, and saved "custom" vessels. This tab includes:
 - Filter by Vessel Type: an icon key that lets users select the types of vessels that they wish to see on the Map, as it defaults to showing all types
 - Data Sources: toggle on/off Data Sources
 - Extended: allows filters to be set by Vessel List, Rules, Alerts, Warning Scores, and Anomalies



Map Filters Cont.

- VESSEL AGE
- AIS
- SHIP REGISTRY



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- Vessel Age: changing this affects the age of vessel reports displayed. The most recent report will be shown for each vessel from vessel age selected to current time
- AIS: this setting allows users to filter vessels based off AIS fields
- Ship Registry: this field allows users to filter vessels based off ship registry information



Baseball Card Settings

- Select/Deselect Items
- History Trail
- DR Vector
- Vessel Details
- Add Vessel to Lists
- Download or Print Information

The screenshot displays the 'Baseball Card Settings' window, which is a grid of checkboxes for various vessel data fields. All fields are currently checked. Below this is the 'lolos Vision' window showing a vessel's data card. A red box highlights the 'History Trail', 'DR Vector', 'Vessel Details', and 'Add Vessel to List' options on the right side of the data card.

Field	Status
Time	Checked
Speed	Checked
Length	Checked
Navigation Status	Checked
Flag	Checked
Age	Checked
Course	Checked
Beam	Checked
MMSI	Checked
Call Sign	Checked
Position (Latitude and Longitude)	Checked
Heading	Checked
Draft	Checked
IMO Number	Checked
Vessel Type	Checked

lolos Vision

Source: SATELLITE AIS
Time: 2020 Jun 16 22:06:56 UTC
Age: 0h 9m 18s ago
Position: 36° 28' 10" S, 21° 59' 46" W
Speed: 11.6 kts
Heading: 86°
Course: 86°
MMSI: 249947000
IMO Number: 9425148
Flag: Malta
Call Sign: 9HA2091
Ship Type: 7-Cargo
Length: 229 m
Beam: 36 m
Draft: 13.6 m
Navigation Status: 0-Underway(Engine)
Destination: Singapore
ETA: 07/10 @ 12:00 UTC

History Trail
DR Vector
Vessel Details
Add Vessel to List





Export Vessels

- Export the vessels in the screen view as a KML formatted file

Opening lists-export-vessel-list-2019-09-17_09-18.kml

You have chosen to open:

 **lists-export-vessel-list-2019-09-17_09-18.kml**
which is: XML Document (650 bytes)
from: blob:

What should Firefox do with this file?

Open with Office XML Handler (default)

Save File

Do this automatically for files like this from now on.

OK Cancel

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- A KML file stores geographic modeling information in XML format. It includes points, lines, polygons, and images. KML files are used to identify and label locations, create different camera angles, overlay textures, and add HTML content
- Google earth is a common application that uses KML files



Rules Dashboard

- Rules are user-created vessel searches, configured to run on a schedule
- The analytics tab provides a graph displaying the number of vessels matching user's Rule over time

MMSI	VESSEL NAME	DATE TIME GROUP
1 100000000	Y806 Navy Tug	241840Z,JUN20
2 100000001	Tara Lee	241716Z,JUN20
3 100000012	9v	241732Z,JUN20
4 100003661	M/Tug Iligan Bay	241845Z,JUN20
5 100021665	Tanua122	241839Z,JUN20
6 100021674	Tanua121	241839Z,JUN20
7 100021685	Tanua119	241837Z,JUN20
8 100021709	Tanua117	241845Z,JUN20
9 100021969	Tanua118	241847Z,JUN20
10 1002	Ancon	241844Z,JUN20
11 100896954	Changlong5	241659Z,JUN20
12 100900000	Hoem Ais Test Ship	241730Z,JUN20
13 100920027	Jgjm Ais Test Ship	241838Z,JUN20

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- Rules query the same data set as the map's detailed Search; however, Rules are run in the background and a user can assign scores (weight) to them
- Rules dashboard allows you to add new rules, run rules, export results from the rules, map the results of your rules, manage rules, as well as view a table of all vessels matching your rules
- Can edit, disable, enable, renew (before or after the 30-day expiration), and delete rules



Creating a New Rule

- Conditions can be evaluated so that the results meet:
 - All conditions
 - Any condition
 - In this option, conditions can be weighted individually to reflect emphasis on some over others
- Users can choose for Rules to be evaluated:
 - Daily
 - Every 12 hours
 - Every 6 hours
 - Every 3 hours
 - Every 2 hours

Create a New Rule

✓ Name Your Rule
Your Descriptive Name Here

✓ Choose How To Evaluate Your Conditions
 Vessels must meet all conditions
 Vessels can meet any condition and will accumulate a score associated with the condition

✓ Set Up Your Conditions

Vessel Type is not 00-Unknown 3 X
OR
Flag is United States of America 5 X

ADD CONDITION

Set Score Thresholds for the Low/Medium boundary: 3

Set Score Thresholds for the Medium/High boundary: 7

✓ Choose The Evaluation Time And Interval
Time of the Day to Run 12:00 UTC Interval Every 2 hours

✓ Done!

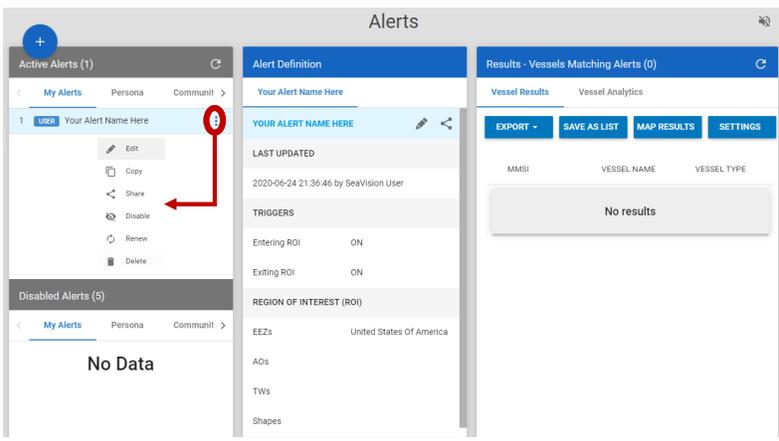
SAVE YOUR RULE





Alerts Dashboard

- Alerts track and analyze vessel activities in real time
- Alerts are run against terrestrial and satellite AIS data feeds



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- The analytics tab provides a graph displaying the number of vessels matching user's Alerts over time



Creating a New Alert

- Alert triggers can be based off a Region of Interest or an AIS Field Change
- Alerts can be configured to include additional vessel filters in the results
- Alerts can be sent to alert subscribers, just the user, or not at all

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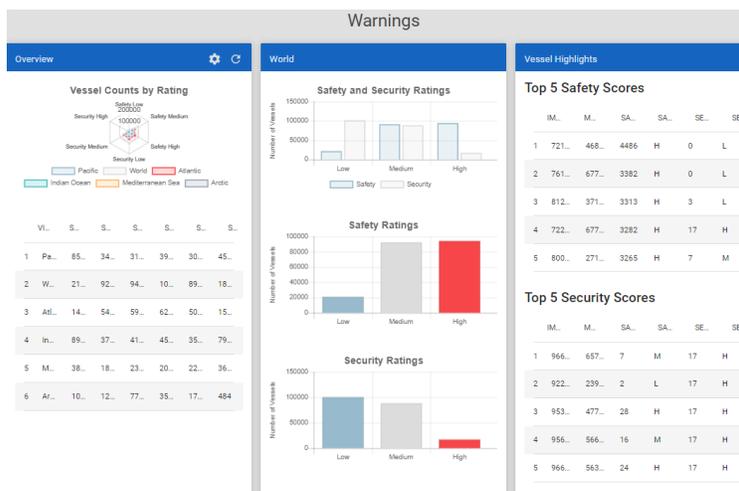
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- Alerts can be triggered by:
 - a vessel only entering, only exiting, or entering and exiting a region of Interest
 - Regions of Interest can be defined by Area of Operations (AO), Economic Exclusion Zones (EEZ), Territorial Waters (TW), or user-defined Shapes
 - An AIS Field Change in:
 - Name
 - IMO Number
 - Vessel Type
 - Call Sign
 - Length
 - Beam
- Users can receive emails with matching alerts to an email address or email distribution list



Warnings Dashboard

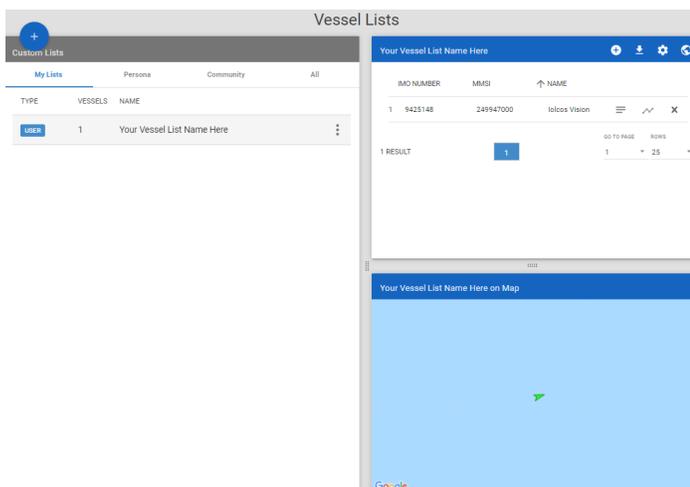
- Overview
 - Vessel Counts by Rating
 - Custom map views populate automatically
 - Warnings Scores are refreshed every 24 hours
- Safety and Security Ratings
 - Low, Medium, or High
- Vessel Highlights
 - Top 5 Safety Scores
 - Top 5 Security Scores





Vessel Lists Dashboard

- Create custom lists by Maritime Mobile Service Identity (MMSI) or International Maritime Organization (IMO) numbers
- Vessel Lists can be used as additional filters for:
 - Rules
 - Searches



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- Users can use Vessel Lists to save ships they are interested in tracking or reviewing
- Users can create multiple lists and add vessels to a list by MMSI or IMO number
- Vessel Lists can also be used as an additional filter criteria for user-defined Searches or Rules



Creating Vessel Lists

- Results of a Search, Rule, or Alert can be saved as a new vessel list
- May be added to a list from the vessel Baseball Card
- May be added by manually entering the MMSI number or IMO number via the add vessel button on the Vessel List Dashboard

Search Results (15492 total vessels)

EXPORT - SAVE AS LIST MAP RESULTS

FLA...	VE...	RE...	CA...	↑ MM...	IM...	VE...	DE...	ETA	NA...	LAT...	LO...	AGE	TIM...
1	Pan...	Dai...	Oce...	3FD...	200...	881...	-	-	-	99	199	1h1...	202...
2	Pan...	Yu...	Cyg...	3EF...	200...	881...	-	-	-	99	199	1h1...	202...

Your Vessel List Name Here

IMO NUMBER	MMSI	↑ NAME
1	9425148	249947000 lolcos Vision

1 RESULT

GO TO PAGE ROWS
1 25

lolcos Vision

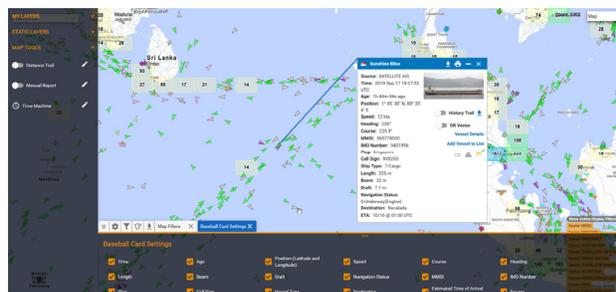
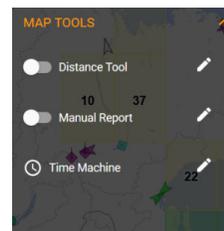
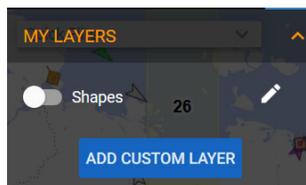
Source: SATELLITE AIS
Time: 2020 May 13 01:29:32 UTC
Age: 0h 15m 24s ago
Position: 0° 49' 9" N, 3° 56' 5" W
Speed: 10.7 kts
Heading: 76°
Course: 80°
MMSI: 371233000
IMO Number: 9166211
Flag: Panama
Call Sign: 3FLD
Ship Type: 7-Cargo
Length: 177 m
Beam: 29 m
Draft: 8 m
Navigation Status: 0-Underway(Engine)
Destination: Cm Dia
ETA: 05/16 @ 16:00 UTC

Add Vessel to List



User Interface Configuration Summary

- Searches
- Chat/Messages
- Map Menu (MY LAYERS, STATIC LAYERS, and MAP TOOLS)
- Map Options (Map Settings, Map Filters, Baseball Card Settings, Exporting Vessels)
- Dashboard (Rules, Alerts, Warnings, and Vessel Lists)





Questions?

