



Introducing Debrief-Lite

from the RN's Maritime Warfare Centre

July 2019

Background

The **Debrief** application was created in 1995 at the Royal Navy's Maritime Warfare Centre (MWC).

The application grew over the years to include a range of tactical maritime analysis capabilities, and is now the workhorse that powers many deep analysis tasks.

But, the full version of **Debrief** brings a learning curve, leaving it unsuited to ad-hoc analysis tasking or for use by untrained users.

In late 2018 the MWC engaged [DeepBlueC.com](https://www.DeepBlueC.com) to develop **Debrief-Lite**, a slimline application targeted at infrequent analysts, internal and external to the organisation. In 2019 the body of candidate users has grown, both within the RN and internationally.



Installing Debrief-Lite

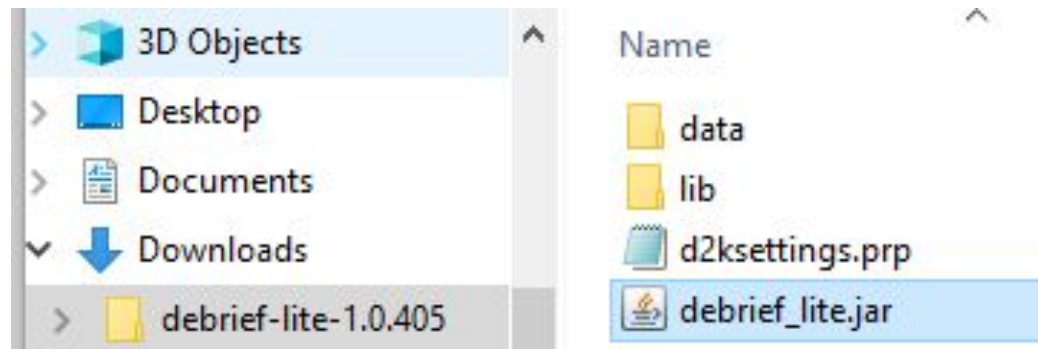
It is most likely that analysts will encounter Debrief-Lite already installed on their PCs/laptops. But, if Debrief-Lite has been obtained independently, the following steps are required:

1. Install Java on the device (64-bit Java Version 8.0 or later is recommended).

Find Java here: <https://adoptopenjdk.net/>

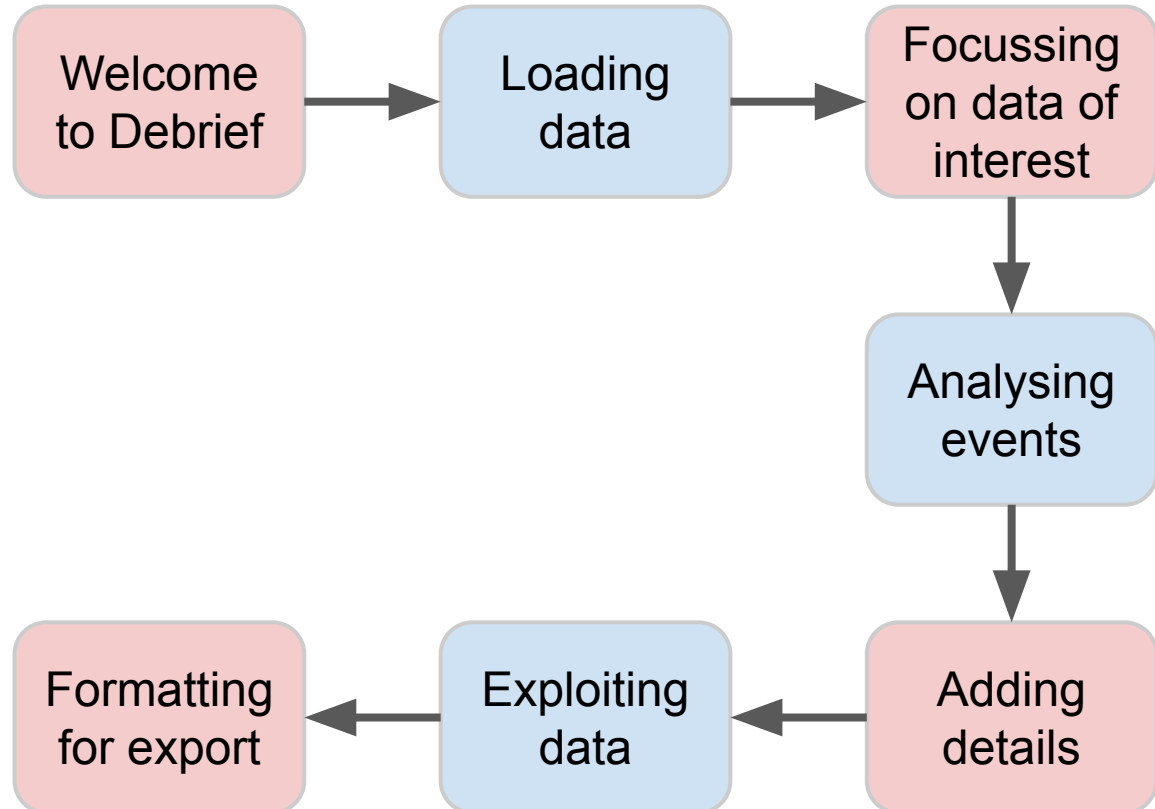
2. Unzip the Debrief-Lite zip file into a suitable location

3. Double-click on **Debrief-Lite.jar**



A walk-through Debrief features

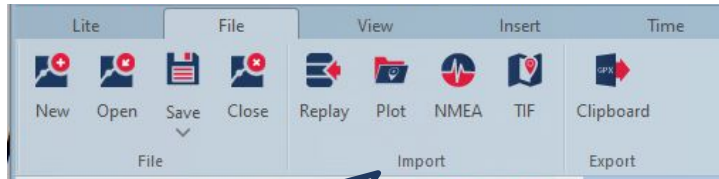
Here's how we're going to break down Debrief-Lite functionality



Welcome to Debrief



Loading data

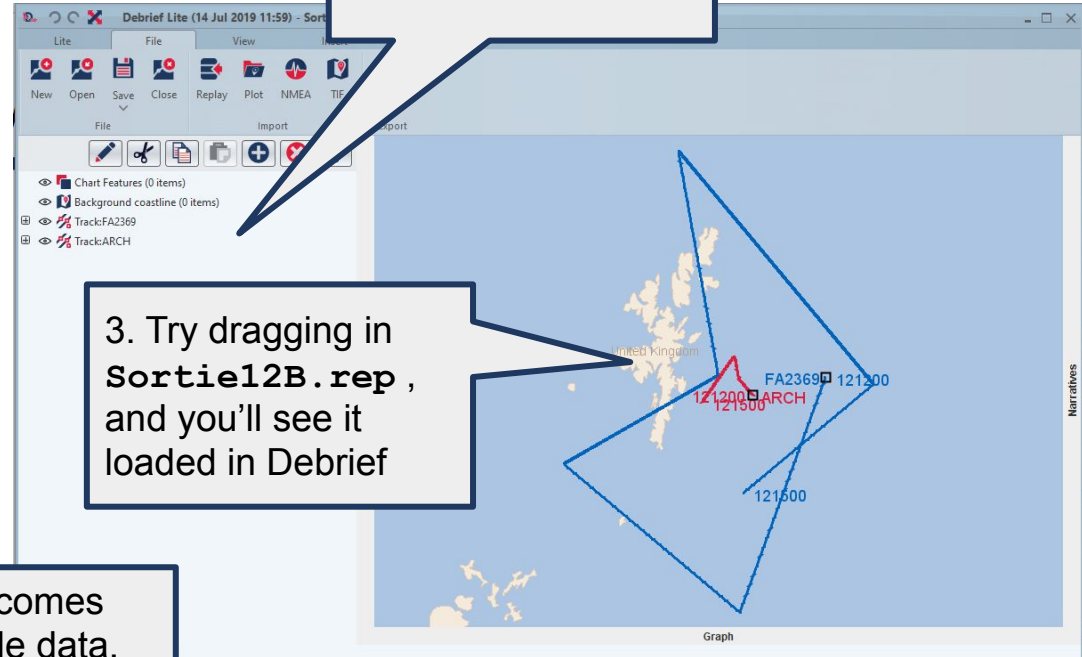


1. Debrief-Lite can load a range of data-types, as shown in the import tab. Click on an icon to open the file dialog, or drag a suitable file into Debrief

Name

- narrative2.rep
- Neptune.rep
- NMEA_TRIAL.log
- Orion.rep
- Sortie12B.rep

2. The app also comes with some sample data, in the sub-folder titled **data/tracks**. Here's what they look like in Windows Explorer:

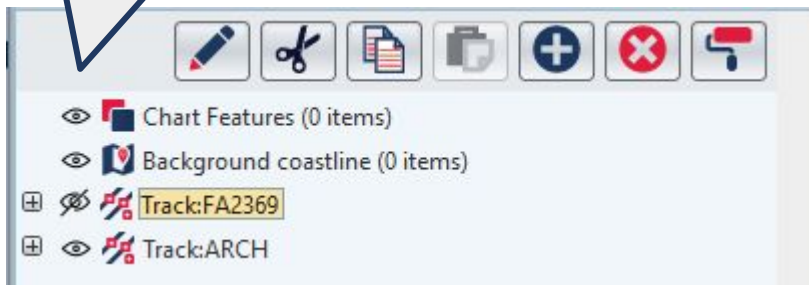


4. Note the two new tracks shown in the Outline tab.

3. Try dragging in **Sortie12B.rep**, and you'll see it loaded in Debrief

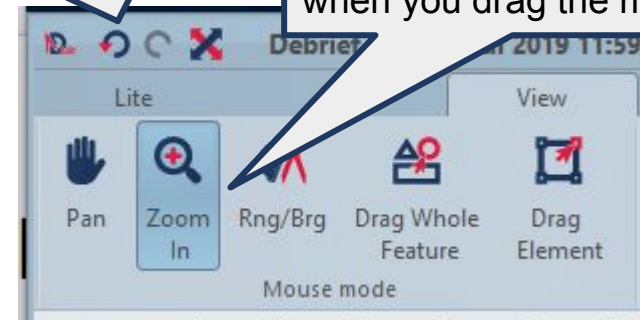
Focussing on data of interest

1. Click on the **eye** icon in the **Outline** to switch tracks (or layers) on and off

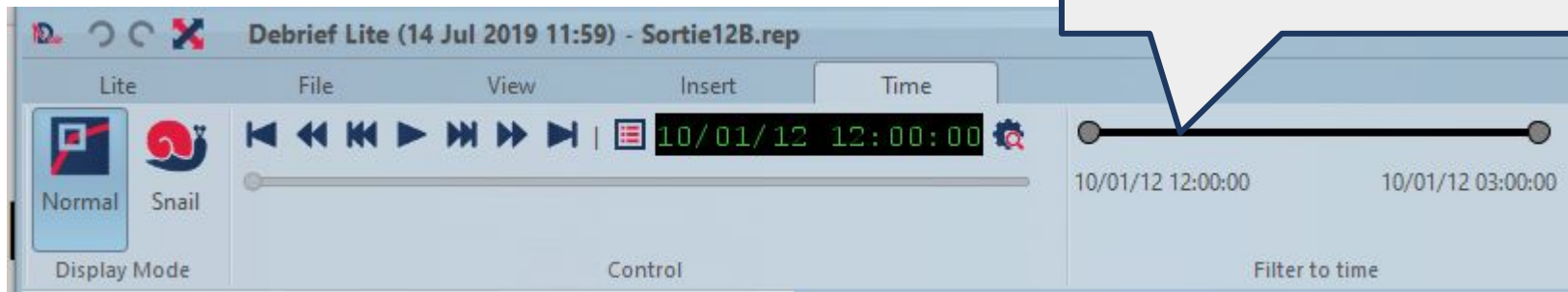


2. After you've edited something (such as changing its visibility) the Undo/Redo buttons become available for use.

3. Toggle between the mouse modes on the **View** menu - they control what happens when you drag the mouse



4. Focus on a smaller period of the sortie by dragging the **Filter to time** controls.



Analysing events - 1

1. To view a graph of the sortie, start by double-clicking on the **Graph** bar.

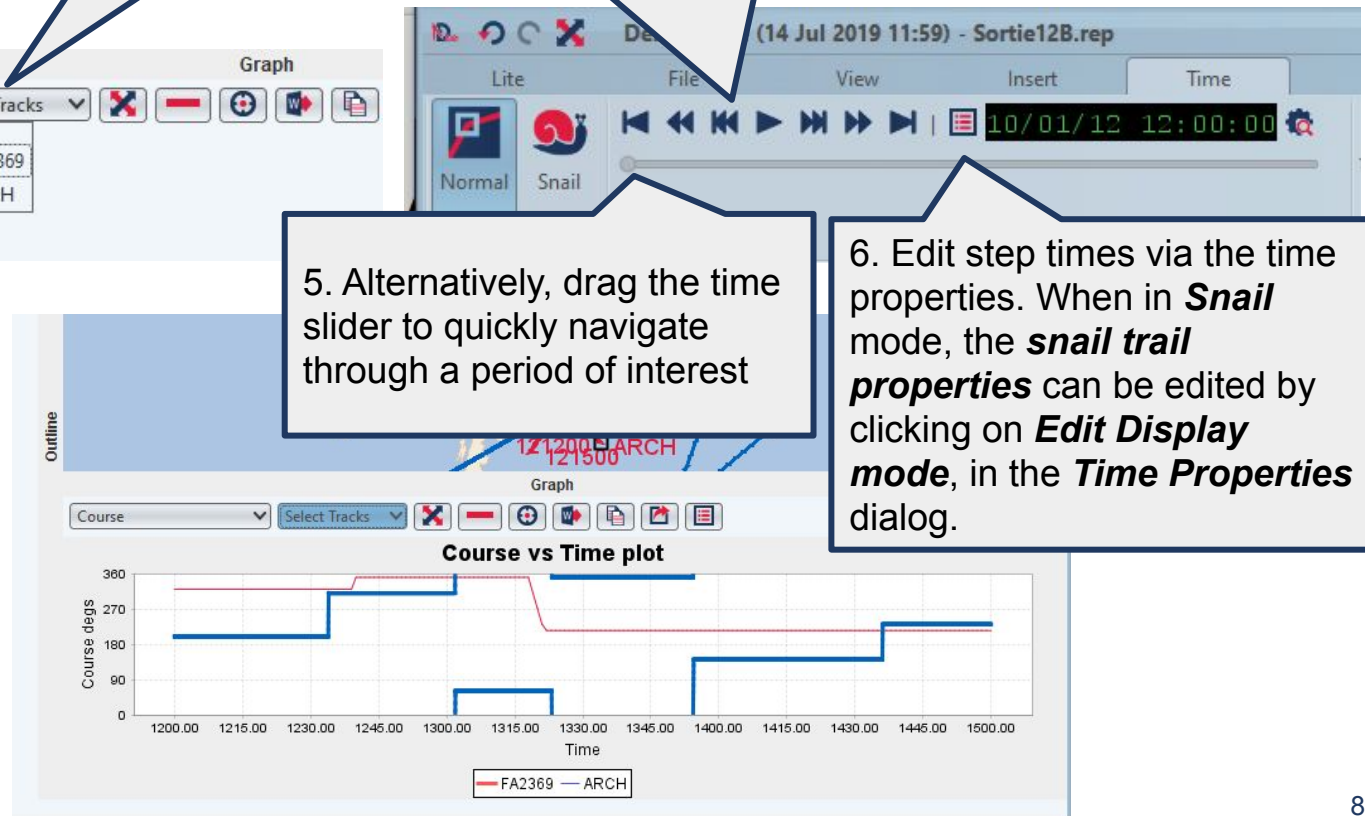
2. Once it's open, indicate which tracks you want to view

4. Use the VCR-style controls on the **Time** tab to move through the sortie - you can also switch between the two **Display Modes** to help focus.

3. Next, indicate what you want to view. Note: for calculated datasets, you may have to go back into the **Tracks** drop-down, to indicate which track the calculations are relative to.

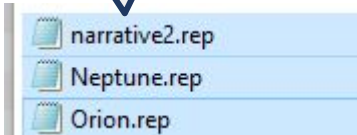
5. Alternatively, drag the time slider to quickly navigate through a period of interest

6. Edit step times via the time properties. When in **Snail** mode, the **snail trail properties** can be edited by clicking on **Edit Display mode**, in the **Time Properties** dialog.



Analysing events - 2

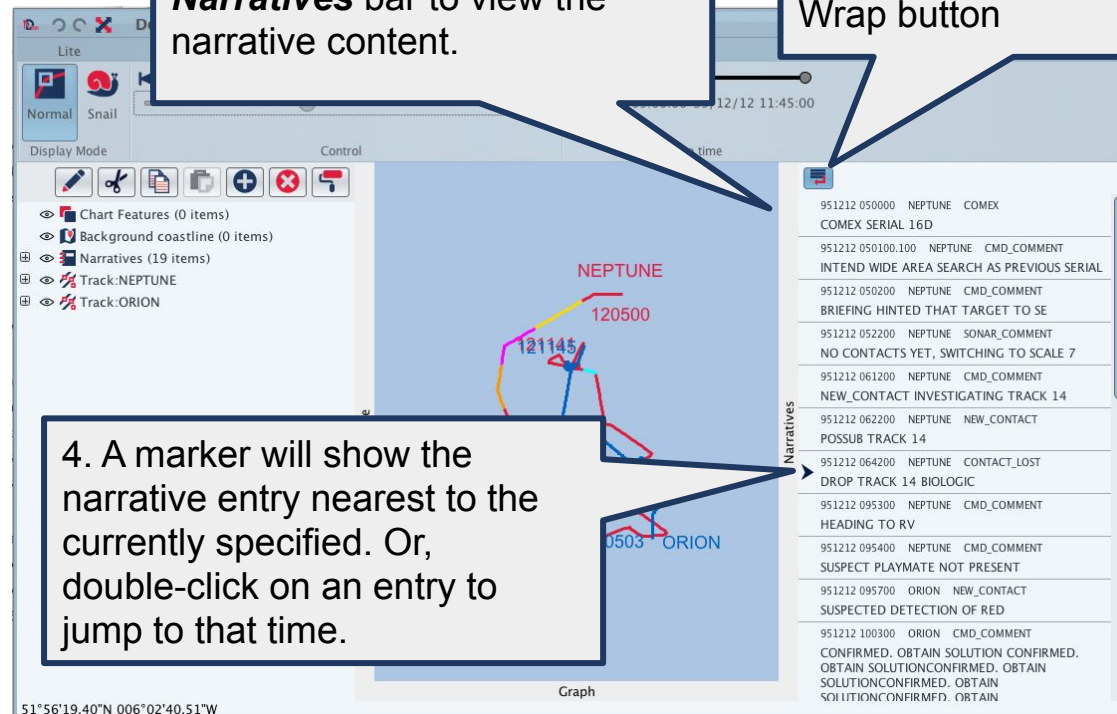
1. In addition to viewing graphs of data, you can also view narrative content. In the sample data folder are two tracks, with supporting narrative.



2. Double-click on the **Narratives** bar to view the narrative content.

3. Control how much data you can see by toggling the Word Wrap button

4. A marker will show the narrative entry nearest to the currently specified. Or, double-click on an entry to jump to that time.



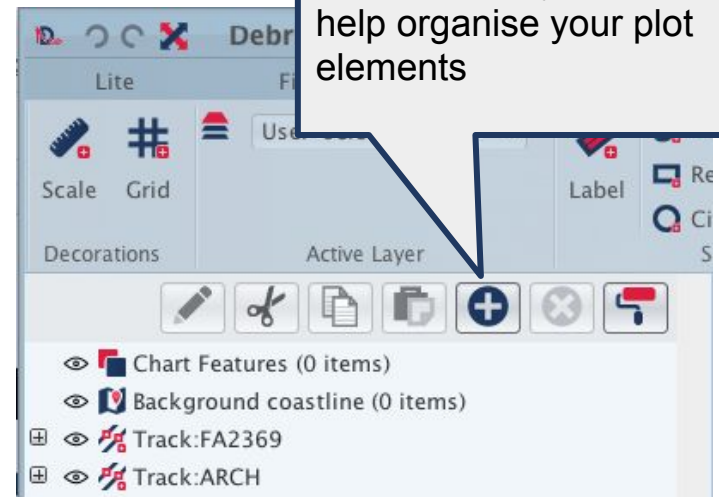
Adding details

1. Adding a **Scale** or **Grid** can help you appreciate distance on the plot

2. Adding **Shapes** can add useful context when you're reporting on a serial

3. Either select the target layer for shapes to be dropped in, or indicate to Debrief-Lite that wish to choose the layer each time

4. Add new layers to help organise your plot elements



2. For even more plot area, double-click on one of the tabs to hide the ribbon bar

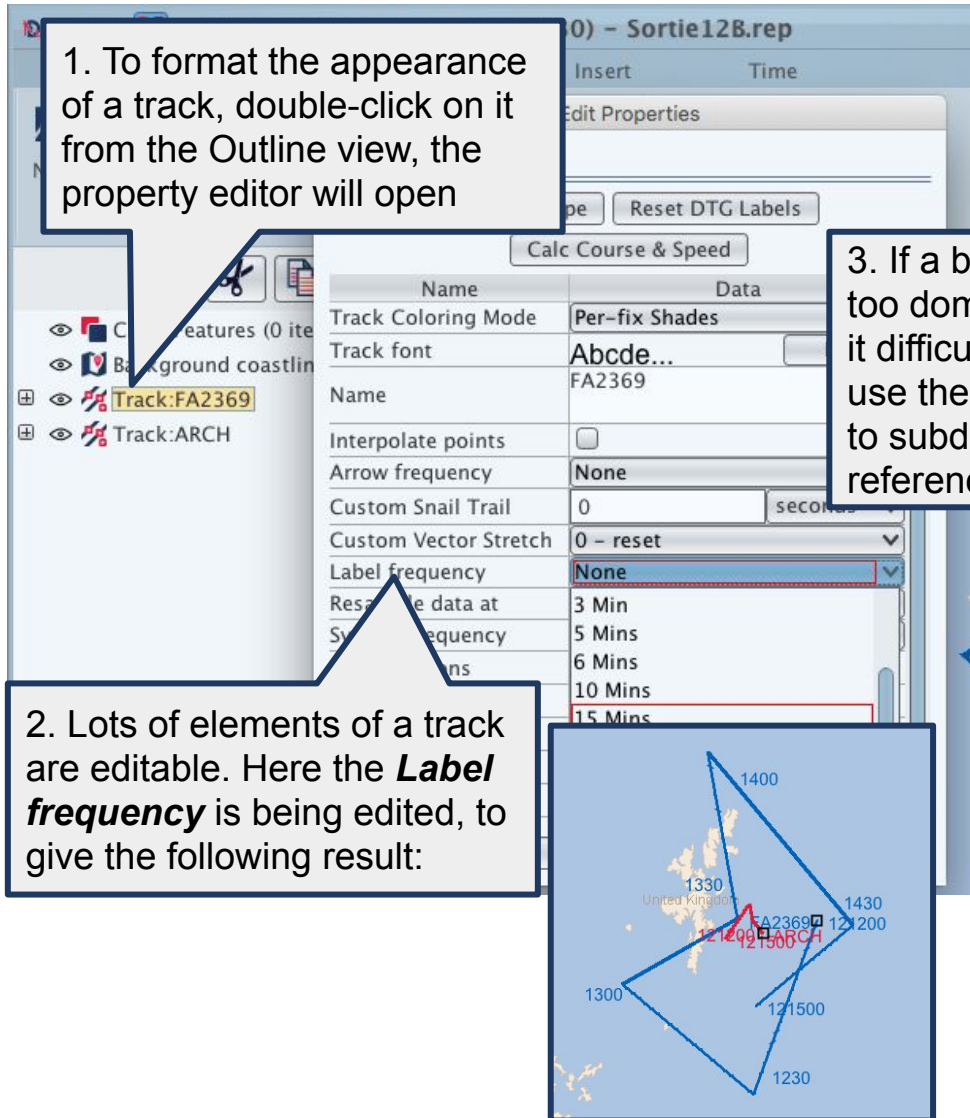
3. To get a copy of your plot into Word or PowerPoint, click on **Export / Clipboard**.

Formatting for export

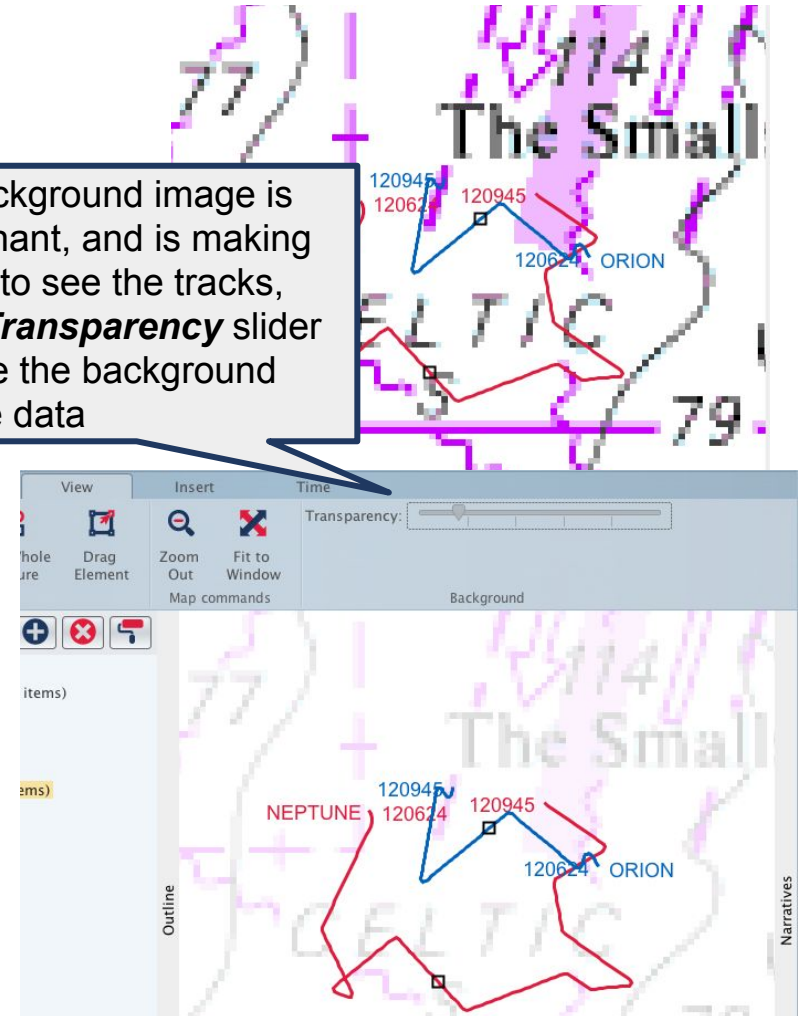
1. To format the appearance of a track, double-click on it from the Outline view, the property editor will open

2. Lots of elements of a track are editable. Here the **Label frequency** is being edited, to give the following result:

3. If a background image is too dominant, and is making it difficult to see the tracks, use the **Transparency** slider to subdue the background reference data



Name	Data
Track Coloring Mode	Per-fix Shades
Track font	Abcde...
Name	FA2369
Interpolate points	<input type="checkbox"/>
Arrow frequency	None
Custom Snail Trail	0
Custom Vector Stretch	0 - reset
Label frequency	None
Resample data at	3 Min
Sync frequency	5 Mins
	6 Mins
	10 Mins
	15 Mins



Transparency: [Slider]

Background

Outline

Narratives

Tips

Performance

1. High volume tracks (either very frequent or covering a long period) can be slow in Debrief. If your analysis permits, you can resample a track from it's property editor.
2. Alternatively, filter the data to a shorter time period, to keep it manageable.
3. If a large track is making Snail trail performance poor, reduce the snail trail length

Label frequency	None
Resample data at	5 Mins
Symbol frequency	30 Secs
Link positions	1 Min
Name at start	2 Min
Name visible	3 Min
Plot array centre	5 Mins
Positions visible	6 Mins
Start/End time labels	10 Mins
	15 Mins

