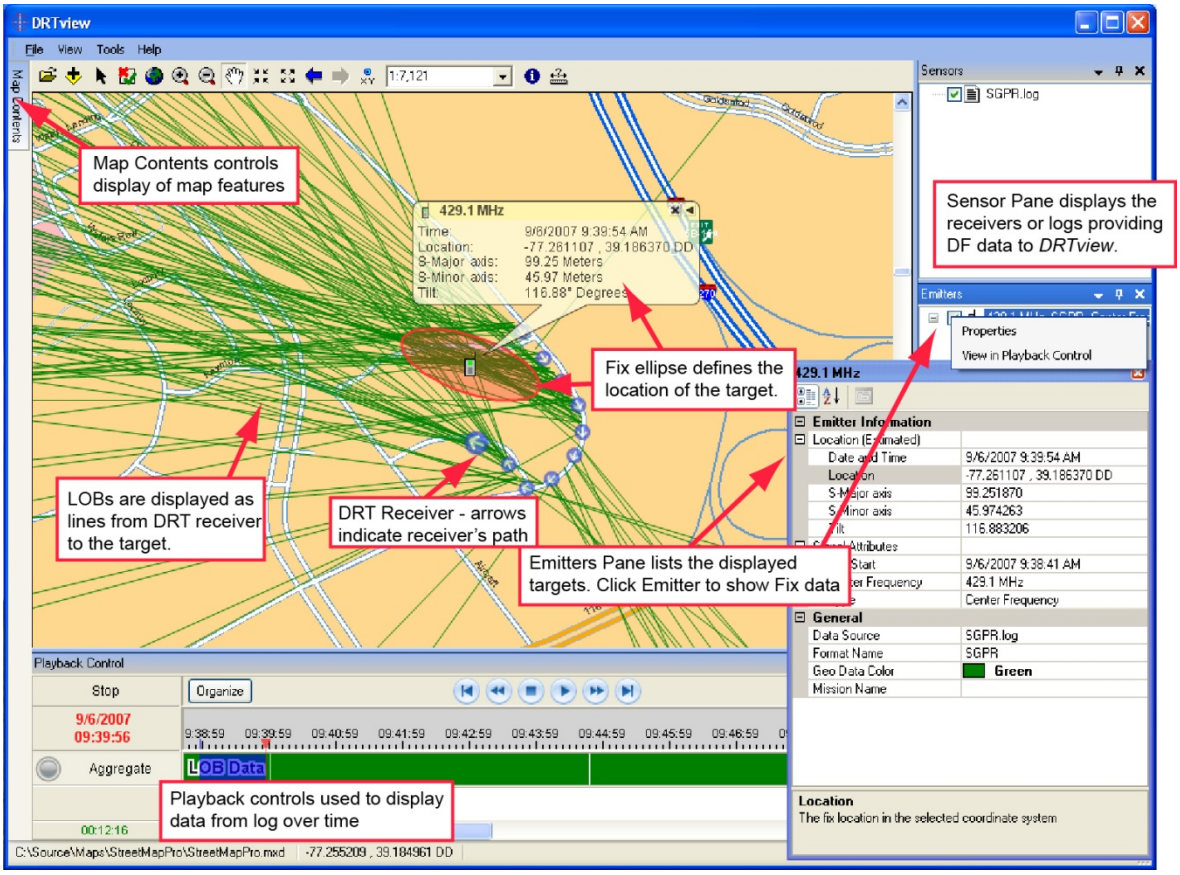


DESCRIPTION

Geolocation Application

DRTview is a geolocation software tool. *DRTview* takes geolocation data such as LOBs provided by a DRT unit (and/or a DRT unit log file), processes it, and displays it on a map. With input from either a mobile station or more than one stationary site, real-time updated geolocation estimates, their respective uncertainty ellipses, and filtered data are displayed. Data for multiple targets may be displayed. When using a GPS antenna, the DRT unit locations are also plotted on the map display.

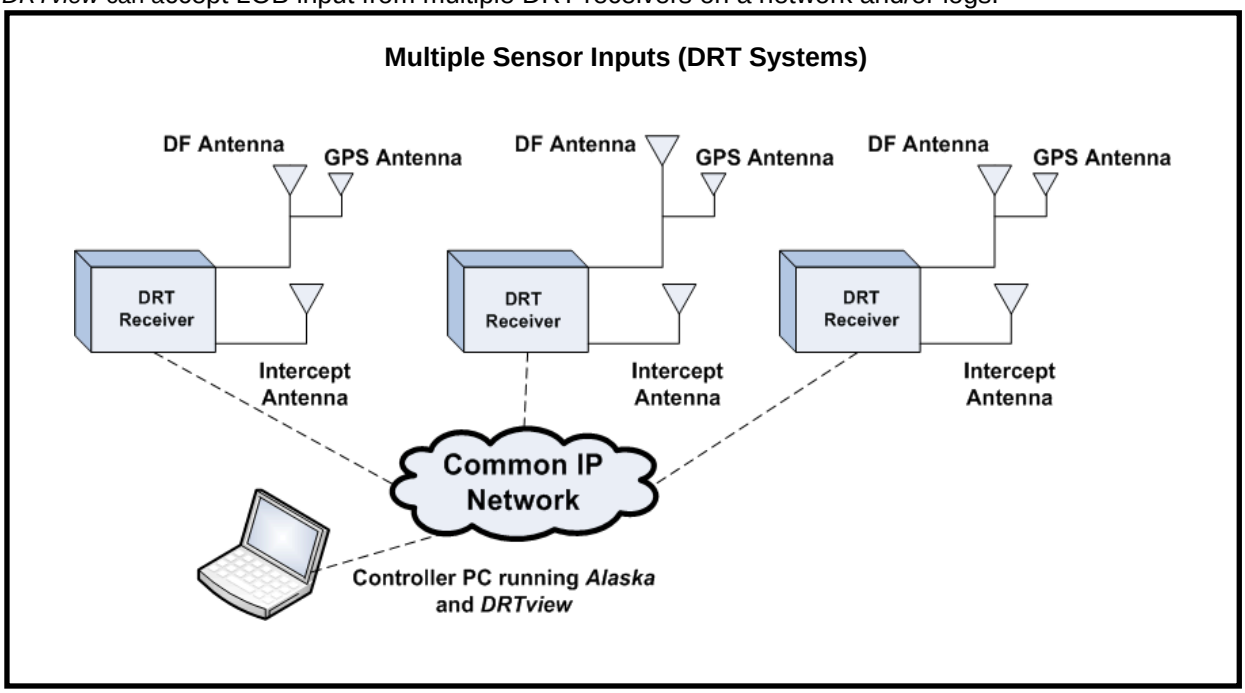
Features

- Displays live data and/or plays back data recorded in logs
- Accepts input from multiple DRT receivers on a network
- Uses data from DRT1000- or DRT4400-series systems
- Accepts LOB data calculated by DRT systems utilizing INS data
- Logs fix data to comma separated (CSV) file
- Exports visible data to KML file format
- Live stream visible data to *Google Earth*
- Accepts maps in all formats supported by ESRI ArcGIS
- Seamless Tactical and Analytical Use
- Automatically or manually groups emitters
- Allows imagery, custom markers and towers, to be placed on the map

Approved by DoD/OSR for public release under 14-S-2418 on 28 August 2014. Data, including specifications, contained within this document are summary in nature and subject to change without notice.

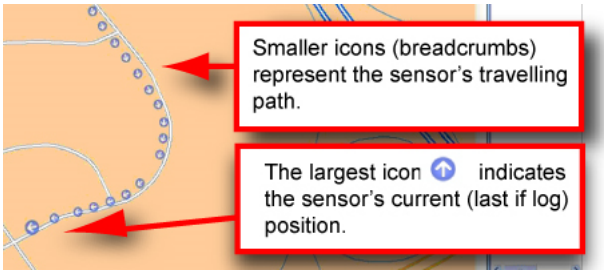
Multiple Sensor Inputs

DRTview can accept LOB input from multiple DRT receivers on a network and/or logs.



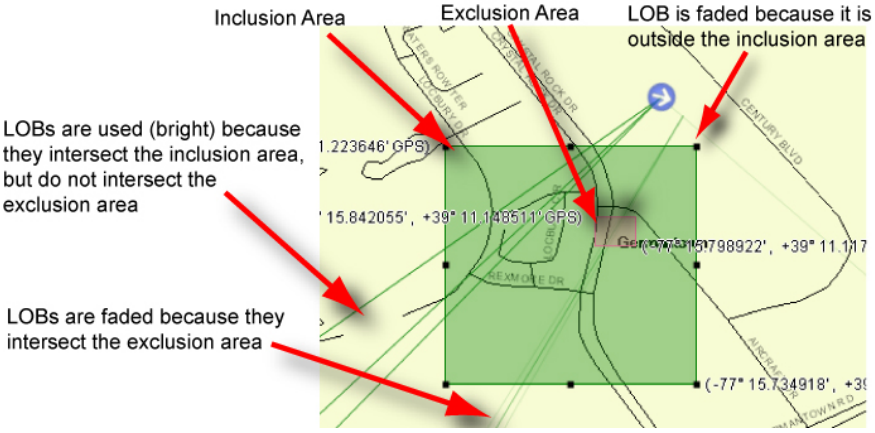
Sensor Tracking

DRTview uses the GPS data from the DRT receiver (whether from a live DRT receiver connection or from the loaded log(s)) to plot the DRT receiver locations on the map. The arrow direction indicates the sensor heading (the direction the sensor is travelling or, if the sensor is stationary, the direction the DF antenna front is pointed). A series of icons represents the path the sensor has traveled. The map may be centered on a sensor's location.



Areas of Interest

You can create areas on the map that define whether geolocation data are excluded or included in the fix calculations. This is done by drawing an Area of Interest to create an inclusion area or an exclusion area. An area of inclusion or exclusion may be inside another Area of Interest.



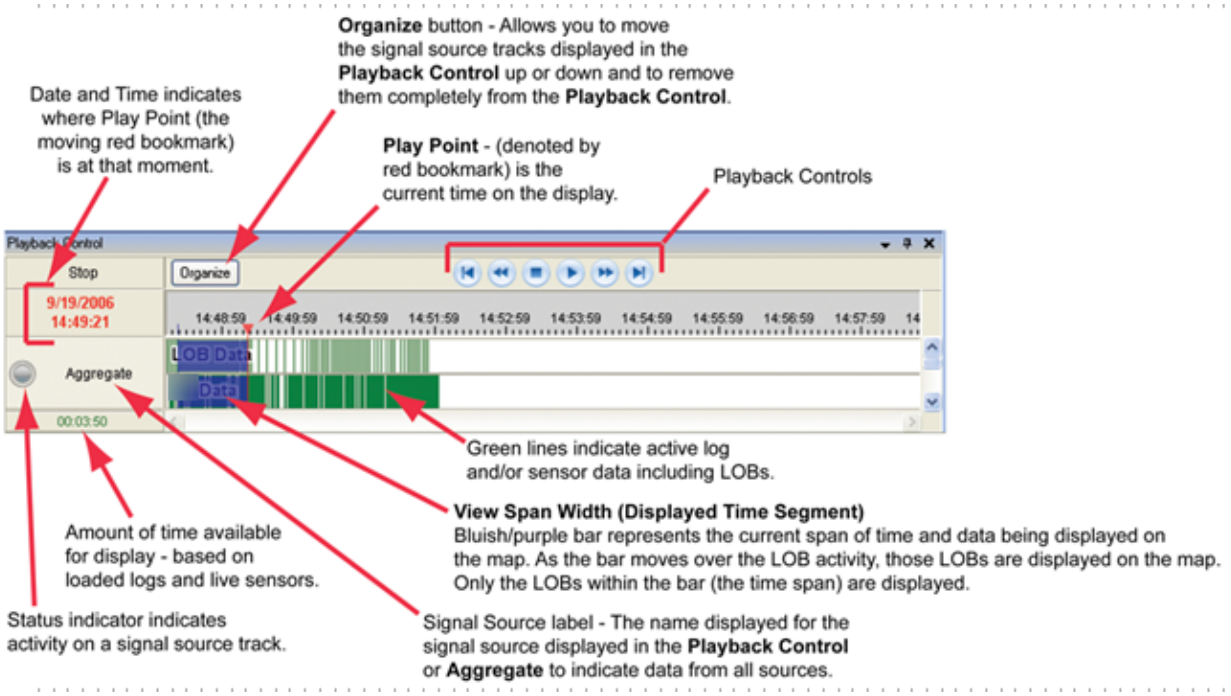
Approved by DoD/OSR for public release under 14-S-2418 on 28 August 2014. Data, including specifications, contained within this document are summary in nature and subject to change without notice.

Live Data Display and Playback

DRTview displays the live data from all selected receivers and/or plays back data recorded in the selected logs:

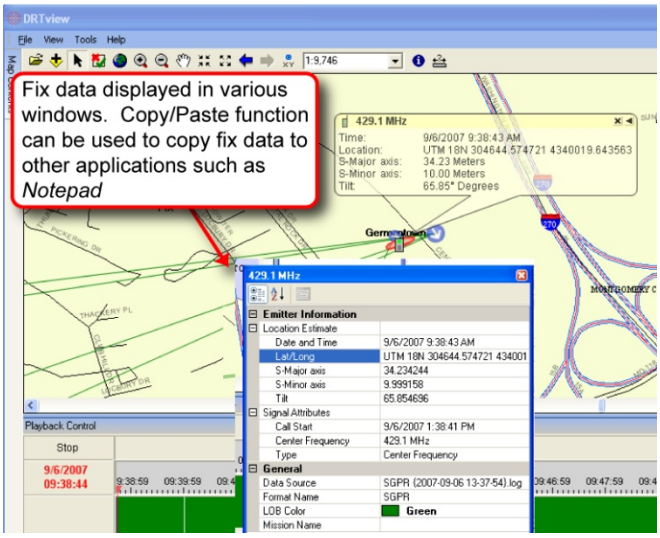
- With live data, *DRTview* receives and displays live, real-time data from DRT receivers. When using live input, the display can be paused and replayed without opening logs.
- When playing back logs only, *DRTview* simulates a live connection by chronologically reading log files based on a simulation clock.
- *DRTview* can also use input from logs and live data simultaneously to create a continuous timeline.

The Playback Control bar represents the time covered by the combination of the entire log file(s) and/or time that has passed during a live mission. The log file's start and end times are identified on either end of the bar.



Fix Data

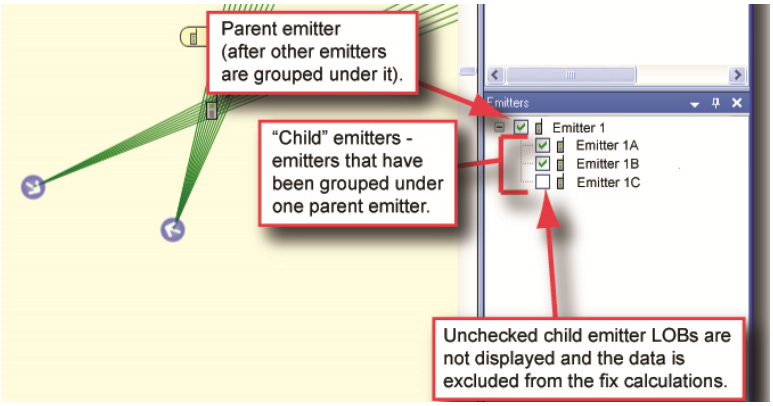
If enough angularly different LOBs are available for the system to compute a fix, the uncertainty ellipse will be displayed on the map (identified by the emitter's identifier). LOBs can be added or deleted from fix calculations using Areas of Interest, Correlation Filters, and selected emitters. When a fix ellipse is displayed, you can view the location information associated with it. The fix data will update dynamically as the fix is recalculated based on more data.



Approved by DoD/OSR for public release under 14-S-2418 on 28 August 2014. Data, including specifications, contained within this document are summary in nature and subject to change without notice.

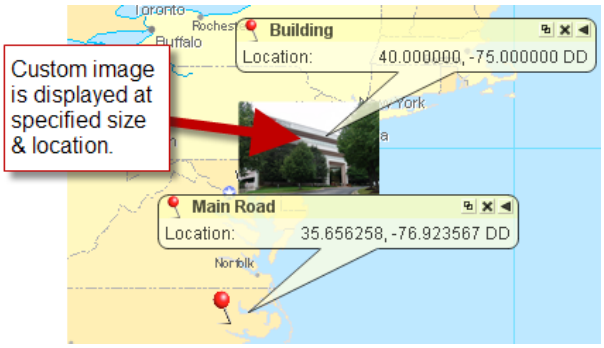
Group Emitters

Grouping emitters/calls allows *DRTview* to use the geolocation data from all of the calls from a single emitter to calculate the fix estimate for that emitter. For most formats, *DRTview* automatically groups emitters (that represent a single target) detected by different DRT units. (Contact DRT for format-specific information.) You may also manually group emitters that are not grouped automatically. This is most likely to be necessary when an emitter is identified as a frequency channel and the system has created separate calls for each bout of detected signal activity. More information about the emitters and the signal can be displayed in **Emitter Properties**.



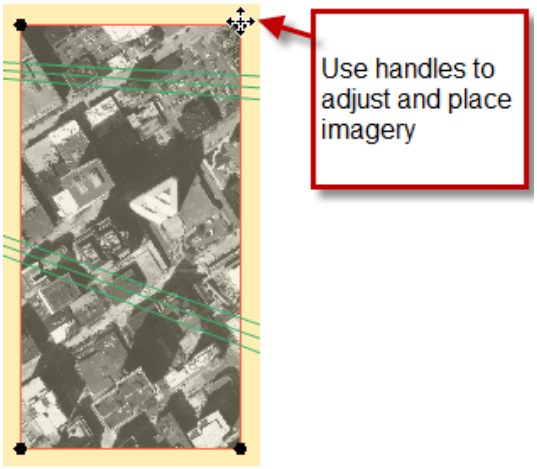
Markers

Markers may be placed on the map manually or imported from another DMXV or CSV file. A custom image may be used as a marker.



Imagery

Imagery such as satellite map imagery can be overlaid on the map and used to show the path of a vehicle and the exact location of emitters in street views. In addition to allowing import of geotagged TIFs, *DRTview* supports PNG, JPEG, BMP, GIF, and TIF image files that do not contain geodata for positioning. You can position the imagery by entering the coordinates for the four corners, or manually position (drag) the image to the desired position using the loaded map as a reference guide. You can also change the shapes of images, resize them, change the transparency, and rotate them.



Approved by DoD/OSR for public release under 14-S-2418 on 28 August 2014. Data, including specifications, contained within this document are summary in nature and subject to change without notice.

12409 Milestone Center Drive, Germantown, MD 20876-7114
Phone: 855-401-4185 ~ Fax: 301-916-5787 ~ www.drti.com ~ international@drti.com

Rev. 2.3-INT, September 2013
© Digital Receiver Technology, Inc., 2013