WinFrog v3.10 Release Notes

Thank you for choosing Fugro Pelagos' WinFrog integrated navigation software.

If this is an UPGRADE to a previously installed version of the WinFrog program, please note that every attempt has been made to make this version backward compatible with version 3.9 and previous versions. However, to ensure no loss of data occurs, it is strongly recommended that you back up the winfrogini.wfg file before running version 3.10 for the first time.

To view a list of the new features and changes added since v3.9, please refer to the WinFrog 3_10 New Features.pdf file on the installation CD.

NOTE: On July 1, 2012 at zero hours the time difference between GPS and UTC increased by one second to 16 seconds. WinFrog has been updated for this in v3.9.24. However, WinFrog allows the user to change this value, which is saved in the configuration (*.CFG) and the initialization (winfrogini.WFG) files. Consequently, when WinFrog loads one of these files created from a previous version, the previous value will be used. If you are installing WinFrog on a PC that a previous version (v3.9.23 and earlier) was already present on or if you are going to load a *.CFG file created by a previous version and want WinFrog to adopt the new 16 second difference, you need to change this value by selecting the menu item Configure > GPS UTC Time Difference. Then enter 16 and click OK.

The following is a list of known issues at time of release:

1. The vehicle speed as calculated by WinFrog is relative to the Map Projection, not the ellipsoid. As a result, where the map scale factor is large, e.g. Mercator projection with a ship a large distance from the origin, the variation between map projection speed and ellipsoid speed is significant, in particular for cable lay operations.

2. Vehicles
    a. If the first vehicle in the vehicle list is configured as fairleads not possible and the second vehicle is configured as fairleads possible with several fairleads configured, when the Anchor Handling window is opened no fairleads appear in the respective drop down lists. To resolve this, leave the Anchor Handling window open and then open the Vehicle Presentation dialog for one of the vehicles and close it with OK. The Anchor Handling window should then update correctly.

    b. Fairleads can be configured for a vehicle that is configured as fairleads not possible.

3. Devices and Data Items:
    a. When configuring the TELEMETRY device, if the Integrity Delay setting is not larger than the Slot Timeout setting, when a member of the telemetry network drops out and then attempts to rejoin the network, the device can end up continuously sending an Integrity message and never re-establish itself in the network.

    b. If an old configuration or initialization file which has a device whose name includes a trailing blank is loaded, WinFrog will not be able to associate the device's data items

with the vehicles they were originally assigned. To fix this, edit the name in the I/O Edit dialog removing the blank and then assign the data items to the vehicles.

c. If the GENERIC device is added and assigned to a port other than the default and the Configure Device option is used to immediately load an *.icf file, upon exiting the configuration dialog with OK, occasionally a message will appear stating the respective com port could not be opened. The port will not accept input data. To correct if this happens, save then load a WinFrog configuration file.

d. When (i) WinFrog is started with a cfg file that has the position auto-switching feature on, and (ii) a secondary POSITION data item is in the list of items attached to a vehicle above a POSITION data item that is set to primary, and (iii) data is arriving for both data items, then a message will momentarily appear that the position source will be switching to the secondary. This is immediately followed by another message stating that the source is switching back to the primary. Simply acknowledge both messages; this has no adverse affect on performance and the primary source will be used. If the primary device is above the secondary device, the messages are not displayed.

e. The OUPUT Video Overlay device configured for the Taylor/Leibnitz Lan impacts the overall performance of WinFrog because each update involves the output of 24 messages at a baud rate of 9600. When two (2) such units are added to WinFrog and enabled, the result can be the slowing of WinFrog operation to an unacceptable level. The 9600 baud rate is a hardware limitation of the Taylor/Leibnitz Lan unit. The problem cannot be corrected by using fast CPUs or large amounts of RAM. It is strongly recommended that no more than one (1) of these units be enabled at any one time.

f. The decode of the NMEA HDG (magnetic) message does not apply magnetic declination to determine the True heading before passing to the vehicle. If this value is used, the declination should be applied as a Heading Offset to the respective HEADING data item.

g. When using the GPS IMCA TELEMETRY device, the configuration of the associated IMCA TELEMETRY auxiliary items selected for output are not saved/loaded to/from the ini and cfg files.

h. The ReadSocket device sets the WinFrog time based on the data in the received data, even if the data is old and no longer relevant.

i. The MX9400 GPS device has not been tested for synchronizing WinFrog to UTC.

j. The use of WinFrog's OPC (OLE for Process Control) devices may not function properly when WinFrog is run on a Windows Vista or Windows 7 (32 or 64 bit) machine as an incompatibility may exist with OPC's use of DCOM and Microsoft's enhanced security with Vista and Windows 7. This only affects two device drivers: CABLE MACHINERY>Plantscape System and OUTPUT>OPCSERVER. Operation on Windows 2000 and Windows XP is unchanged.

k. The LBL ROVNAV-MINI device has not been tested for compatibility with Vista nor Windows 7 (32 or 64 bit).

4. Working Files:

    a. If a very large amount of event data (*.DAT, *.SRC and/or *.RCV) is loaded in WinFrog memory, WinFrog performance can be degraded.

    b. When configuring automatic eventing, if a file name is entered that includes one or more '.' but does not have the term ".DAT" manually included at the end, the portion of the file name that comes after the last dot is removed from the file name and DAT is added. If the term ".DAT" is manually entered, the file name is used as entered in its entirety.

    c. When a LOG file is loaded, only 10 vehicles are loaded even though more than 10 may have been logged.

5. Profile Window operation associated with the Profile Type > Continuous Profile mode:

    a. Any vehicle, whether it is configured as a Surface Layer or not, can be selected to be centered on, and that vehicle's track line is used to control the Profile Window display. When WinFrog is closed and reopened or a configuration file is loaded, the line tracked by the Surface Layer vehicle is automatically assigned and used to control the Profile window regardless of the setup when WinFrog was closed or a configuration file created. If this vehicle does not have a track line, WinFrog automatically changes Profile Type to Projected Profile. In this instance, the Profile Window will not draw as configured prior to exiting or saving the respective configuration file.

    It is recommended that when operating the Profile Window in Continuous Profile mode, only the vehicle configured as the Surface Layer be selected to center on.

    b. If there are survey lines with similar names such as those generated using the Parallel line option, e.g. Line, Line+50, Line+100, etc., and one is selected as the track line for the Surface Layer, e.g. Line, when WinFrog is closed and reopened or a configuration file is loaded, WinFrog may select the wrong line to use to control the Profile Window resulting in an incorrect Profile Window display. The Profile Window must be re-configured to correct this.

    It is recommended that when operating the Profile Window in Continuous Profile mode, the names of survey lines be such that all have different beginnings.

6. In the Calculations window, when the Time Series or Pos. Comp. Time Series features are in use and the Calculations window width is increased significantly, the time series does not display correctly.
7. WinFrog uses the GeoView library from Blue Marble Geographics for import and display of various map formats. The following points should be noted concerning this feature:

    a. When the Plot Map option is enabled for a Graphics window and a BMM background is displayed, the re-centering option "Reposition vehicle near edge" does not work. Instead, the window is redrawn with the respective vehicle in the center of the window.

b. The consideration of the appropriate background color in the Graphics window is important since if it is the same as a feature color in one of the imported file types the feature will be masked and will not be visible in the window.

c. It is important when using this library to ensure that the coordinate system and units of the BMM file you are importing are the same as the geodetics and units set within WinFrog. You will be prompted to ensure they are equivalent. If they differ, the display will be inaccurate and the results unpredictable. No conversion is done for either the units or the geodetic settings.

d. When reading in some vector file formats, the extent of the map cannot be correctly determined resulting in an incorrect initial viewing scale being set in the preview window. You can manually modify the scale by entering a value in the preview window and updating it so that the initial scale in the Graphics window is correct.

e. Some known limitations of the Blue Marble GeoView library are as follows:

   i. Support for some layer and feature types in certain vector file formats is incomplete.

   ii. For DXF files, the following types are supported: Arc, Circle, Line, Point, Polyline, Solid, Trace, Text. Point symbols are not displayed; instead a small cross is drawn at the location.

   iii. For DGN files, the following features can be read and drawn:

      LINE 2D

      LINE STRING 2D

      SHAPE 2D

      CURVE 2D

      BSPLINE POLE 2D

      ELLIPSE 2D

      ARC 2D

   iv. If a DWG file contains a circle and the map is rotated, the circle is distorted into an ellipse.

   v. If a DWG file includes annotation of geographic graticule, the “º” symbol is not correctly displayed, instead appearing as “%%”.

   vi. For SHP files, information in the DBF file is not read or drawn. Polyline M is not supported.

   vii. It is important to verify the completeness and integrity of the imported image in the Graphics window.

8. File naming:

   a. Do not use commas and spaces when naming files.

   b. Use dots only to indicate a file extension.

9. Controlled Remote operation issues:

    a. When the Position Tab Tx Interval is set back to 0 (off) after having been set to transmit, the position text in the Vehicle Text window for the respective Remote vehicle stays black, although it stops updating.

    b. When configuring a Controlled Remote vehicle shape from the Controller, occasionally the transfer of the shape to the respective Controlled Remote and/or the subsequent transfer of the accepted shape to other Controlled Remotes experiences problems with approximately the first 15 points. These points are drawn correctly relative to each other, but are offset from where they are intended to be. The problem can be corrected by re-transmitting the vehicle shape. In the case of a problem at the respective Controlled Remote, re-configure that Controlled Remote vehicle at the Controller. In the case of a problem at other Controlled Remotes, click the Rem Update button. This problem has only been detected when utilizing the maximum number of points supported.

10. Utilities:

    a. It is important to note the following points associated with the Import Bathymetry utility:

        i. When a header record is to be loaded it may necessary to add a comma to the end of each header record to prevent the line feed from being interpreted and included as part of the data.

        ii. The parameters in a header record have to be exactly as specified in the documentation, e.g. the degree symbol and the number of spaces.

        iii. The data records must be comma delimited and have 4 values. No error is given if this is not the case and the database is said to have been created even though it is not.

        iv. The Z value is a depth not an elevation.

11. LBL issues:

    a. The Sonardyne DLLs used by the MiniRovNav device driver do not support the release (RL) and depth interrogation (FD2) commands.

    b. For LBL calibrations, when using the Recalc LBL button to reprocess LBL calibration raw data to scaled LOPs, because of changes to the Turn-Around-Time (TAT), velocity file, station depth or transponder HI, the new TAT, depth and HI are not automatically updated to the calibration file station data. This must be done using the Edit Xponder feature.

12. If WinFrog unexpectedly terminates, you may have problems trying to restart the application and encounter a message indicating that an instance of WinFrog is already running. This is caused by the previous session of the program remaining resident as a process in memory. Terminate the previous run by bringing up the Task Manager, select the Processes tab, scroll down the Image Name column until you find the WinFrog.exe application, select this line and click the End Process button. You will then be able to re-launch WinFrog.

13. Running an antivirus program simultaneously with WinFrog can be detrimental to the performance of WinFrog. If system scanning is enabled for continuous protection, ensure files that have the WFG, RAW and DAT extensions are removed from the scan list within the antivirus software. This is because while raw data logging and/or eventing, WinFrog writes data to a *.raw and/or *.DAT file and the virus scanning can cause a noticeable delay. Data are written to the *.WFG file whenever a change is made to WinFrog's configuration. If there is still a noticeable degradation in performance and there is no real possibility that the PC running WinFrog will be vulnerable to virus attack during operation, it is recommended that the antivirus program not be run.

14. It has been reported by Microsoft and Intel that for systems using a processor with SpeedStep or similar technology, it is possible that the high performance timing counter available in Windows, and used by WinFrog, may display erratic behavior. This has apparently been addressed in Windows XP service pack 2. It has also been reported by Microsoft that using an x64-based version of Windows with AMD Cool'n'Quiet enabled in the BIOS can cause the high performance timer to perform incorrectly. A fix for this can be found on the Microsoft website at http://support.microsoft.com/default.aspx?scid=kb;en-us;895980.

Finally, if you encounter problems using the software, please fill out the Technical Support Form that you can find in the WinFrog installation directory or on the CD under Documents > Release Info. It indicates where to send it when completed.

Once again, thank you for using WinFrog.