

# GPS Pathfinder Office®: New Features

April 8, 2010

This document describes the new features included in versions of the Trimble® GPS Pathfinder® Office software since version 2.9 was released. The new features are reported relative to the previous version.

## **Version 4.20 (December 2009)**

### **Enhancements:**

- An entirely new post-processing engine with the following upgrades:
  - H-Star receivers are post-processed to decimeter accuracy in tougher environments and at longer ranges from the base station.
  - GeoXT™ and ProXT™ receivers now achieve 50-cm accuracy, improved from submeter.
  - Juno series handhelds now achieve post-processed accuracy of 1-3 meters, improved from 2-5 meters.
  - Accuracy estimates for both code and carrier data are more precise and consistent.
  - GLONASS data logged using a GPS Pathfinder ProXRT receiver (with the GLONASS option installed) can now be post-processed.
  - Carrier data logged by the GeoXT and ProXT over a period of 45 minutes can now be processed to achieve 1 cm accuracy with a base station within 10 km.
  - Support for post-processing with L1-only base station measurements has been re-added.
- Direct export of data to KML/KMZ formats for use in Google Earth.
- Support for Windows® 7
- Text attribute fields length increased to 230 characters in the SSF file.

### **Additional Changes:**

- Windows 2000 is no longer supported.

## **Version 4.10 (March 2008)**

### **Enhancements:**

- Support for the following receivers:
  - GPS Pathfinder ProXRT receiver
  - Trimble® Nomad® series handhelds
- Support for the use and display of positions collected using GLONASS satellites.  
*Note – This version of GPS Pathfinder Office software cannot post-process GLONASS measurements.*
- The Differential Correction wizard now supports the following:
  - Fixed carrier processing
  - Simple, single-base H-Star processing
- A projection file can now be specified when exporting to ESRI Shapefile format.

## **Version 4.00 (March 2007)**

### **Enhancements:**

- Support for Windows Vista and for 64-bit Windows XP and Vista operating systems.
- Support for concurrent license management: by installing the Mapping and GIS License Manager software on a network server, you can manage multiple licenses for the Pathfinder Office software. Using the GPS Pathfinder Office License Administrator software, users of the GPS Pathfinder Office software can choose either a single use or a floating license.
- Full support for version 3.00 of the TerraSync™ software.
- Enhanced support for importing ASCII waypoint files.
- Support for the following types of background files:
  - ECW files
  - MrSID v3 files
  - JPEG 2000 files

**ELECTRONIC DATA SOLUTIONS®**

P. O. Box 31, Jerome, ID 83338

Ph: (208) 324-8006 Fax: (208) 324-8015 [www.elecdata.com](http://www.elecdata.com) [support@elecdata.com](mailto:support@elecdata.com)

- Changes to the Data Transfer utility to support the following:
  - Transfer of ECW, Shapefile, MrSID, and JPEG 2000 background files to a device or computer running the TerraSync Professional software
  - Transfer of waypoint files to or from TerraSync

**Additional Changes:**

- The *GPS Pathfinder Office Software Help* is now provided as HTML help.
- Windows NT is no longer a supported operating system.
- The following utilities are no longer provided with the GPS Pathfinder Office software:
  - Quick Plan™ utility
  - Text Conversion utility
  - Stand-alone DOS utilities
- The default setup for the Data Transfer utility is now GIS Datalogger on Windows Mobile.
- Client-server installations are no longer supported.

**Version 3.10 (April, 2005)**

**Enhancements:**

- The new Differential Correction wizard replaces the Differential Correction utility for standard code processing or carrier processing for a float solution. You can also use the wizard to process data collected with a Trimble receiver using H-Star technology.
- The Differential Correction wizard produces an improved Differential Correction Report that shows a summary of the estimated accuracy ranges for the corrected positions.
- The Batch Processor utility has been updated with additional property pages for differential correction.
- The Base Provider list in the Differential Correction wizard has been updated to show different integrity index types, depending on the type of data collected at the base station. These types are:
  - Code
  - Single Frequency Carrier
  - Dual Frequency Carrier
- The WGS-84 reference frame has been updated and aligned with the global International Terrestrial Reference Frame (ITRF) definition. For GPS purposes, the WGS-84 and the ITRF-00 reference frames are the same. Reference frames for system-defined base providers in the base provider list are now provided using the ITRF reference frame.
- The real-time WAAS (Wide Area Augmentation System) correction option has been changed throughout the GPS Pathfinder Office software to real-time SBAS (Satellite Based Augmentation Systems). SBAS incorporates other regional systems, including WAAS, EGNOS (European Geostationary Navigation Overlay System), and MSAS (MTSAT Satellite Augmentation System). SBAS status is reported in the *Position Properties* dialog of the main program, the SSF Record Editor and the Export utility.
- The Configuration Manager utility has been updated so you can now create a configuration file for the TerraSync software, version 2.50 or later. You can configure which satellites the TerraSync software must track, or more easily configure Bluetooth® wireless connections using the expanded list of serial communication ports and Bluetooth Serial Ports.
- SNR values for TerraSync software files are now stored and displayed as Carrier-to-Noise ratio (C/No) values, measured in decibel-Hertz (dBHz). Previously, signal-to-noise ratio (SNR) values were stored and displayed as Amplitude Measurement Unit (AMU) values.
- The Data Transfer utility has been updated so that you can transfer some file types to any storage location on a GIS datalogger running the Microsoft Windows CE operating system and the TerraSync software version 2.50 and later.

**NOTE: Due to a new satellite being launched, all customers with Pathfinder Office version 3.0 or lower are entitled to a free update to version 3.10. Please contact Electronic Data Solutions to obtain an install code.**

**Version 3.00 (September, 2003)**

**Enhancements:**

- A Base Provider Integrity Index in the Differential Correction Utility displays quality indicator values for each entry in the differential correction base provider list. The values are used to determine which base stations will provide the best free base data.

- More detailed differential correction summary messages and a more detailed log appear in the *Differential Correction Completed* dialog.
- Trimble Virtual Reference Station (VRS™) systems are now supported. Single base and virtual base RINEX files can be accessed from a Trimble VRS system through the iGate Communication Protocol for post-processing.
- The base provider list includes an additional 700 base stations.
- A centimeter processing option allows carrier phase fixed position solutions to be generated in the Differential Correction module.
- ShapeCorrect is now a standard component of GPS Pathfinder Office software. Use ShapeCorrect to update ESRI Shapefiles with corrected GPS positions collected with GPSCorrect extension for ESRI ArcPad software.
- The Data Transfer utility has been updated to support TIFF files sent to TerraSync software version 2.40 or later.
- Position Type reporting has been improved throughout GPS Pathfinder Office software to provide consistency. Position types are reported in the *Position Properties* dialog of the main program, and the SSF Record Editor and Export utilities.
- Support for the Windows XP Tablet PC Edition.

### **Version 2.90 (January, 2002)**

#### **Enhancements:**

- Differential correction of SuperCorrect records logged using TerraSync software version 2.10 or later. SuperCorrect records provide increased accuracy and yield in positional data. This provides Differential Correction utility users with increased processing options, including filtering adjustments.
- Point symbols now use fonts for display in the *Map* window, rather than bitmap symbols.
- You can now assign a symbol to a feature in the Data Dictionary Editor and transfer it with the data dictionary to the TerraSync software version 2.10 or later.
- Complex offset support for point features recorded using TerraSync software version 2.10 or later provides support to display and edit multi-bearing and multi-distance based offsets. You can edit and view the offsets, and filter the offset information shown in the *Map* window.
- Nested line and area support allows you to view nested lines and areas on the Time Line.
- ASCII AutoCAD® DXF import provides support to import GIS data from DXF files.
- The differential correction base provider list now includes more than 300 additional base stations.
- Compressed RINEX (Hatanaka) base files are now directly supported by the Differential Correction utility.
- The new GPS Pathfinder Office Updater utility allows you to quickly and easily obtain software updates, language files, and documentation updates from the Trimble website.
- Support for the Windows XP operating system.