GPS data to OCAD (Windows)

12/04/2009 - Rev. 12

- **Preface**
  - OCAD imports directly from Garmin Etrex
  - GPX file format import is the most direct route from GPS to OCAD if you don't have a Garmin Etrex
  - This example based on Magellan Meridian and Magellan eXplorist 210
- **Resources**
  - GPS Utility
    - to create GPX file from GPS data
    - GPX is a standard interchange format for GPS files
  - OCAD 9
    - see Flash 'How To ' on the topic
    - see downloadable samples on the topic
  - Trimble Planning
    - not needed for this process but great tool for planning GPS field work **free**
    - Enables you to determine best times of day for GPS work
    - Sample: this tells me not to bother using GPS in the forest here except 1230-1330 on this day
- **Setup**
  - GPS Utility
    - set up for your GPS
      - serial interface
        - **GPS | Setup**
        - Complete for your model. Ignore below **Autosave**
      - USB interface
        - No setup required as the GPS file is transferred from your GPS as a text file.
    - OCAD 9
      - Create a special symbol for GPS POI — e.g. red registration cross
      - Create a special symbol for GPS POI ID — e.g. red text
      - Create a special symbol for GPS track — e.g. red track
- **POI (Point of Interest) = Waypoint**
- **Assign OCAD symbol**
  - If CRT not used for each file imported
  - Select any GPS track, POI or POI text
  - Select a relevant OCAD symbol
  - **Change all symbols**
  - repeat for each GPX symbol
- **Import GPX file**
  - In OCAD select **GPS | Import from GPS**
  - **OK** to "Unable to connect to GPS!"
  - **Load**
  - select your GPX file
  - **Open**
  - select file(s) [usually already selected]
  - Option
    - **Set labels** to import text with POI, tracks
  - Option
    - **Extras | Convert layers** to access CRT table to translate to OCAD symbol
    - Will work for track file as CRT and GPX names can be set to match (not sure of naming if multiple track facility of some GPS units is used)
    - CRT may not work for POIs as these are discrete entities in my experience
      - xplorist = Anchor as layer name for POI and POI name
      - Check how to distinguish between the two for CRT conversion
    - I don't use CRT as selecting and converting on the OCAD map is quite simple if special colours are set for GPX files
  - Option
    - choose to not select POIs that have been loaded in previous imports
  - **Create**
  - **Close**
- **Create GPX file**
  - Serial interface
    - In GPS Utility **GPS | Download all**
    - read waypoints (Points of Interest) and tracks from GPS
    - save as GPX file.
      - either save combined track and waypoints
      - or save separate track and waypoints
  - USB interface
    - Use GPS software or Windows Explorer to transfer file(s) from GPS to PC
    - Rename files to suffix .TXT
    - In GPS Utility **File | Open** to select and read each .TXT file
    - **Save As .** GPX the combined POI+track file or separately
  - Edit track
    - to remove unwanted segments, often easier to edit track in GPS Utility than in OCAD
    - In GPS Utility, delete multiple segments in reverse sequence