



ArcGIS for Windows Mobile: User Guide for Rangefinder Extension (Windows Mobile)



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ArcGIS for Windows Mobile 10; 10.1.1; 10.2

Rangefinder extension for data collection task 10.0

<http://www.arcgis.com/home/item.html?id=28c2fd9fd28b47a889b343ba7f63c591>

TruPulse 360 models

System Requirements:

Windows Mobile Platform

Windows Embedded Handheld 6.5 Professional and Classic editions

Windows Mobile 6.0, 6.1 and 6.5 Professional and Classic editions



Introduction

Rangefinder extension implements a new geometry collection method that allows user to use current GPS location as a reference point, and use a rangefinder to shoot target vertex.

The offset information from rangefinder will be applied to current GPS location, and create corresponding target vertex for you. This works for point, polyline, or polygon geometry collection.



How to Use it

Follow the checklist below to prepare for using the extension:

Refer to User's Guide to connect the TruPulse 360 model to the data collector/GPS device via Bluetooth®.

Turn on the power on a TruPulse® 360B laser rangefinder

Enable Bluetooth on rangefinder

On your Windows Mobile device, enable Bluetooth, and find/add TruPulse to your device list

Create an outgoing port on your Windows Mobile device for your laser rangefinder

Load compiled DLL and the .ame file to \Program Files\ArcGIS Mobile\10 folder

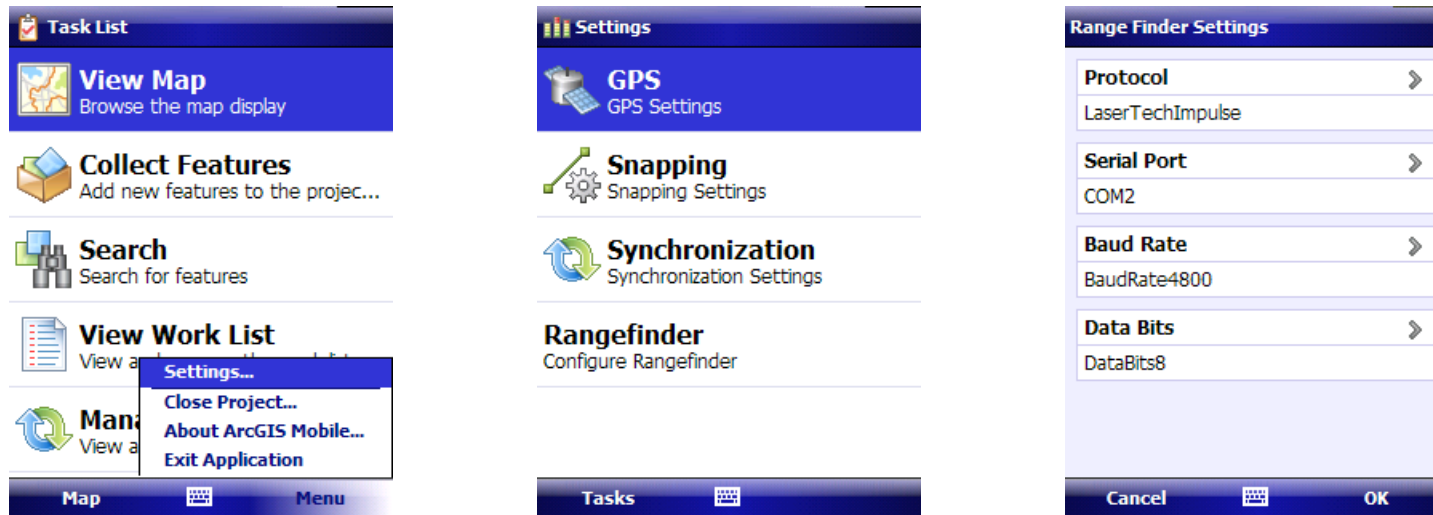
Have a mobile project ready on your Windows Mobile device. Make sure that the project extent covers the area where you intend to use GPS device

Run ArcGIS Mobile application on your device, and open the project.

Configure Rangefinder

Following the tutorial below to configure your rangefinder:

1. While the project is open, use Menu > Settings to bring up settings list.

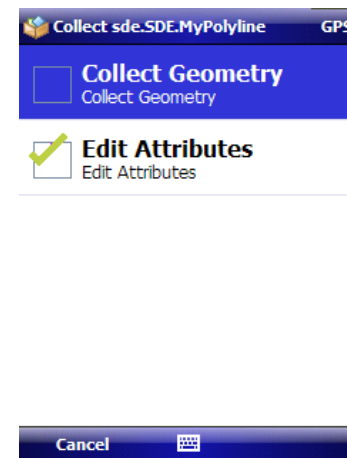
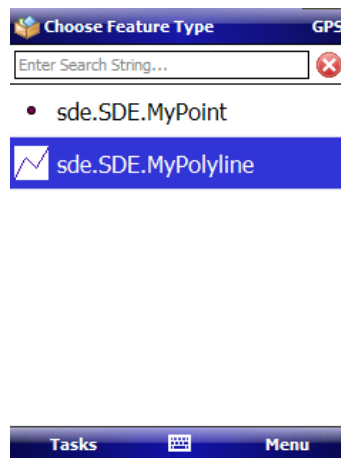
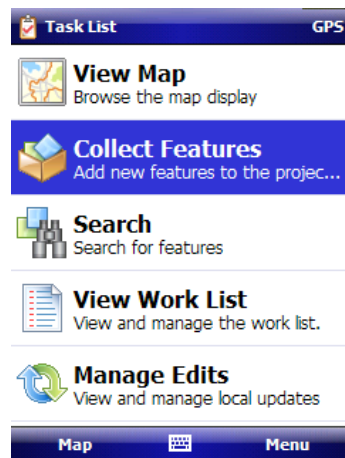


2. Tap “Rangefinder” from the list
3. Make sure you set the Serial Port to the COM port you created at step 4 on preparation checklist
4. Make sure you set Baud Rate and Data Bits correctly.
5. Tap OK to apply the settings.

Using the Extension

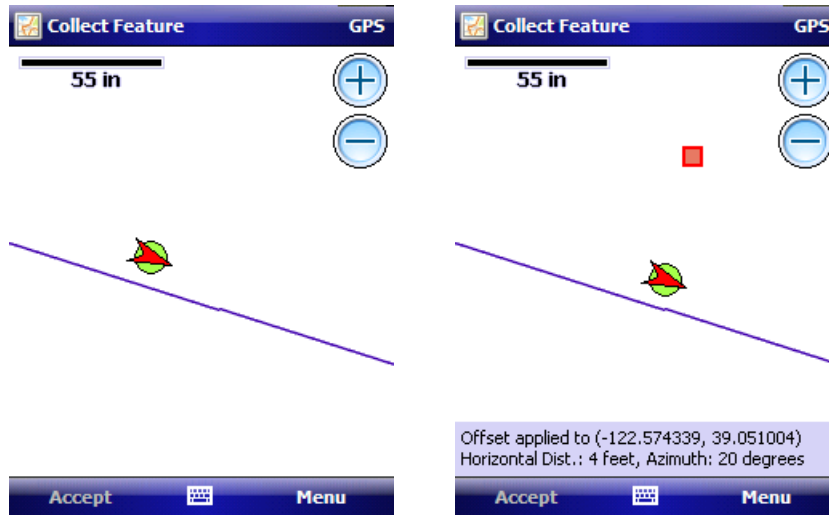
The following is a quick tutorial on how to use the extension once you start data collection.

1. Select Collect Features Task from Task List page, and then select a feature type. It could be point, polyline, or polygon feature.

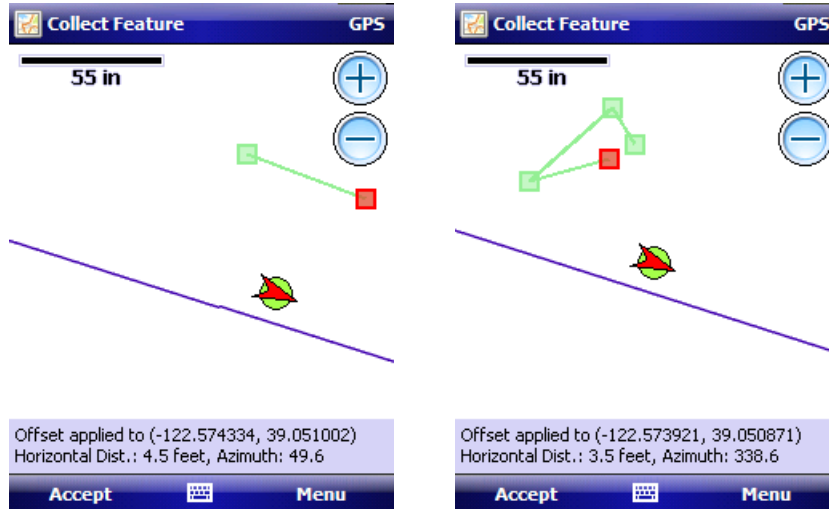


2. Tap Collect Geometry option, and you will see a list of geometry collection methods. The last one is “Use GPS/Rangefinder” option which is implemented by this project extension. Tap on it to continue.
3. Collect a GPS point, aim to the offset feature with the TruPulse laser, and then press the fire button on the TruPulse laser. The offset feature is collected and displayed.

Using the Extension (continued)



Offset applied to (-122.574339, 39.051004)
Horizontal Dist.: 4 feet, Azimuth: 20 degrees



Offset applied to (-122.574334, 39.051002)
Horizontal Dist.: 4.5 feet, Azimuth: 49.6

Offset applied to (-122.573921, 39.050871)
Horizontal Dist.: 3.5 feet, Azimuth: 338.6

4. Aim at the next feature and press the fire button. One can repeat collecting offset features.

5. Press menu then press Save and Finish once all features are collected.