MapOnHand

MapOnHand from DotMap SAE is a thorough mobile Geographic Information System (GIS) to be used in hand held mobile PC devices, using PocketPC's windows CE. It is based on MapXMobile technology and has most of the features that users may need in a GIS pocket application.

Taking GIS applications off the desktop and into the field "*where real world objects are realized*" is now possible via MapOnHand.

Features

- Zoom In, Zoom Out, Pan.
- Full Layer Control
- Advanced Zooming Capabilities with named views
- Re Center Map.
- Single and multiple selecting and deselecting.
- Marquee, Radius, and Polygon Select
- Custom Labels.
- Thematic Mapping.
- Extensive Search functionality.
- Creating and Editing features (objects) and data.
- Calculating Distance.
- Info Tool.
- Buffering.
- Magnifier.
- Geoset Manager.
- Exporting Map.
- Tracking capability using GPS
- Field survey and analysis using tracking functionality

Technical Remarks

- MapOnHand should be deployed on Pocket PC 2000 or 2002 having StrongArm processor (iPAQ, Toshiba etc).
- MapOnHand work with any GPS connected through RS232 interface and use the NMEA standard v2.0 or later. It also work with the famous NavMan GPS
- MapOnHand is developed using Embedded Visual Basic and MapInfo's MapX Mobile.
- Data can be synchronized with the desktop, including MapInfo .TAB and .GST files using Microsoft ActiveSync.

Benefits

- MapOnHand is a complete mobile GIS solution.
- No need for paper maps.
- MapOnHand takes GIS applications off the desktop into the field where real world objects are realized.
- MapOnHand saves resources in data capture, editing, analysis, and verification since it works anywhere whether indoors or outdoors. This functionality can be enhanced with using a GPS.
- MapOnHand is efficient, fast, and scalable.
- MapOnHand displays Vector and Raster data.
- Easy Synchronization of data between the mobile device and the Desktop.
- No specific data types are needed for MapOnHand. MapOnHand works with native Mapinfo .TAB and GST files (No conversion needed).
- MapOnHand can be localized to any language.
- MapOnHand gives you the functionality of tracking yourself, saving a certain track, field survey and on the fly data entry.

MapOnHand Functionality

Mapping
MapOnHand can display all vector and raster maps by reading MapInfo TAB files and GST files.

Geoset Manager
Manage your data, by reading or creating a ***Geoset*** through which different MapInfo tables are collected to form the map. Changing zoom value, scale, and the default map view of the geoset can be done.

Navigation
Users can interact with the map directly by clicking and dragging, using the provided navigation tools.

Viewing
Users can change map views by specifying the desired Map scale, Zoom level, and Map Center. MapOnHand, moreover, provides a magnifier through which users can get a magnified view of a certain desired location.

Named Views
Users can set names for certain map views in the opened geoset according to their preference, through which users can switch in-between at any time with just one button click.

Selections
Discover MapOnHand's analytical features by grouping and organizing data. Select map features within a specific radius, rectangle, or specific points.

Layering
MapOnHand gives users full control of the different layers contained in the geoset, through which users can change the ordering of the layers. They can add or remove layers, trigger visibility, automatic labeling, and set the editable layer. Furthermore, users can change the display properties of all available layers, and finally set the labeling properties.

Searching
Search for specific attribute information in layers and fields using MapOnHand's powerful searching functionality. Searching involves single or multiple results, in addition to the availability of finding streets' intersection.

Buffering
Create Buffers around point of interest, and query all underlying objects.

Editing
MapOnHand allows users to create new objects, edit, and delete existing Map objects. Users can also edit the existing style of any object, in addition to editing attribute information.

Info
Users can get information about data attributes associated with map objects.

Raster Images
MapOnHand supports raster images as well as vector data, through which maps can have an attractive and detailed backgrounds.

Thematic Mapping

Visualizing data in MapOnHand is performed efficiently via thematic mapping. Thematic mapping helps in discovering different patterns in the data enhancing the decision support process. Users can visualize data using any of four different styles (colored ranges, dot density, individual values, and graduated symbols).

Exporting Maps

Users can save different snapshots of the available map as BMP images.

Tracking

Users can track themselves as they move using any GPS that works with the standard NMEA format. They can save their tracks on MapInfo table files together with the following information: date, time and heading of the points acquired.

Data Collection

With the ability of tracking, users can specify a certain MapInfo table file where the selected points will be saved. MapOnHand will give the user the ability of completing the remaining data of that table. Also users can set MapOnHand to capture points over a certain street in which MapOnHand will connect all the points it acquired over that street, draw the street, and give the users the ability of entering the remaining data.

Who should use MapOnHand?

- MapOnHand can be used by anyone (engineers, surveyors, data collectors, sales and marketing reps etc).
- It is crucial for anyone who wants to view, retrieve and locate real world map attribute data in an efficient and fast way.
- It is essential for anyone who seeks quick and accurate editing capability of data directly in the field, without using paper maps and drawings.
- Finally, adhering to the contemporary demand of being Mobile more now than ever, comes MapOnHand as an efficient mobile GIS application.