Optimizing the Use of Data with SuperGIS Desktop in A Cost-effective Way

Ava Lai

Sr. International Support Engineer

Supergeo Technologies Inc.

Supergeo®

SuperGIS Products

Supergeo®

Server GIS
SuperGIS Server
SuperGIS 3D Earth Server
SuperGIS Network Server
SuperWebGIS

Cloud GIS
SuperGIS Online
- Data Services   - Excel Add-in
- Address Locator   - Statistical API

Desktop GIS
SuperGIS Desktop
- Spatial   - Spatial Statistical
- 3D   - Biodiversity
- Network   - Topology
- 67-97 CTS (TW only)
- CCTS (TW only)

Developer GIS
SuperGIS Engine   SuperNetObjects
- Network   - Spatial
- Biodiversity - 3D
- Spatial Statistical

Mobile GIS
SuperGIS Mobile Engine
SuperPad
SuperField
SuperSurv (Android/iOS)
SuperVeyor (Hardware bundle)

Solution
SuperGIS Mobile Tour (Android)

Mobile Cadastral GIS (TW only)

Outline

- The key features of **SuperGIS Desktop v3.2**, combining with real case scenarios:

  - Case 1: Generate Cache Map (Cache Generator)

  - Case 2: Data Sharing in Spatial Database, based on OSM

  - Case 3: View the GIS Data in PDF (Geospatial PDF)

  - Case 4: Rectify on Image data (Georeferencing)

  - Case 5: Precise Mapping (COGO, Advanced Editor)

  - Case 6: Produce Map Atlas (Feature Guided Pages)

SuperGIS Desktop: basic

- Common use tool: zoom in/out, pan…etc.

- Right click to call out other extensions or add-ons
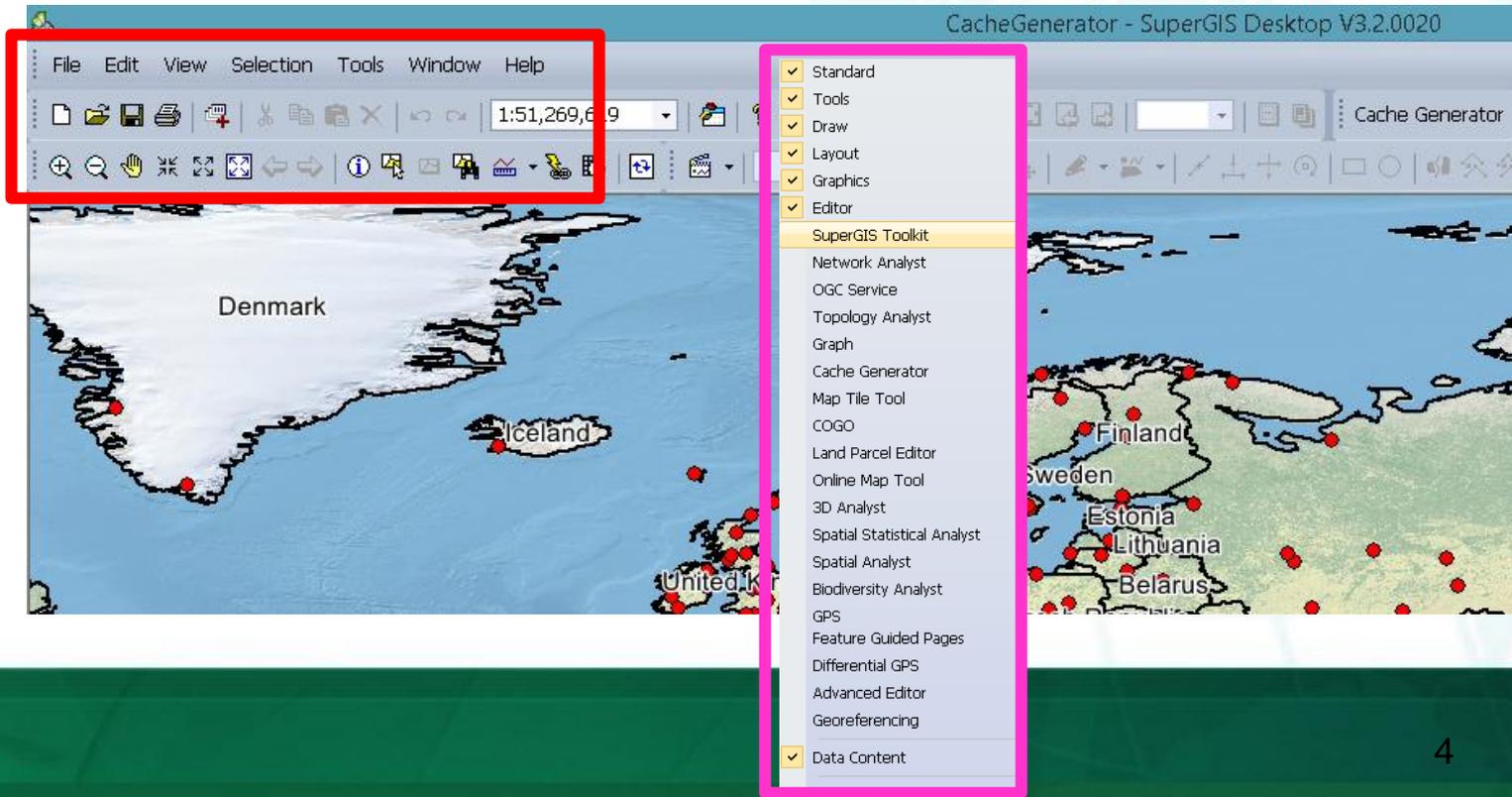
Case 01: Generate Cache Map

- Why we need to have Cache Map?
  - Survey in the field by using mobile solution
  - Without internet connection
  - How to ensure the location and start to do the survey?

Mobile
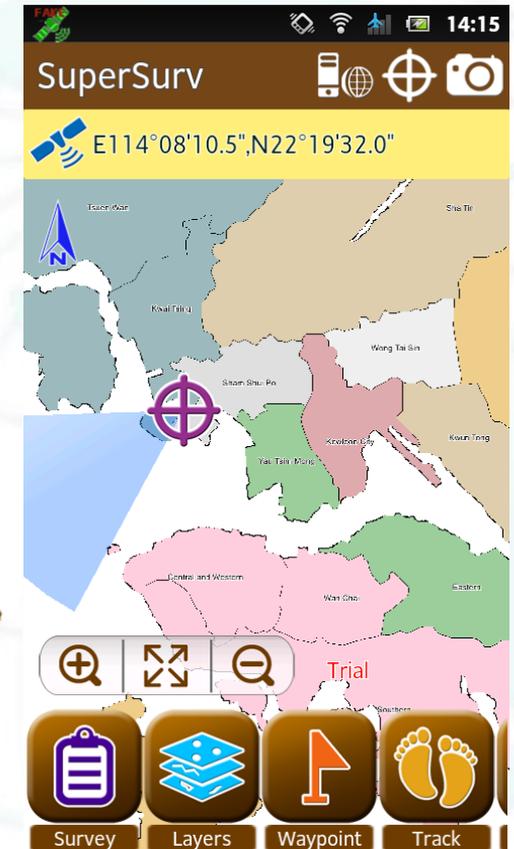
Generate Cache Map

- Cache Generator in SuperGIS Desktop
  - Produce Supergis Tile Cache : color, pattern, labeling…etc.
  - Even visible scale
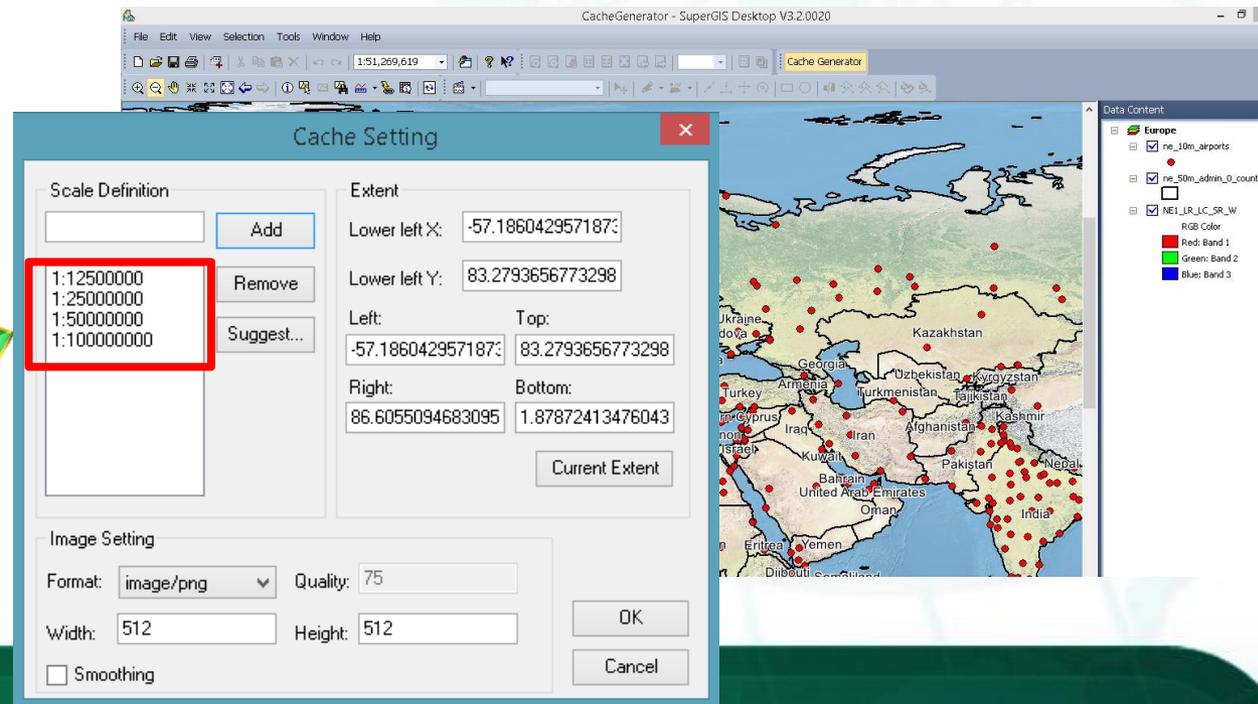
View in SuperGIS Desktop

- From the tool: Add Layer
- Properties settings to display the layers

Desktop
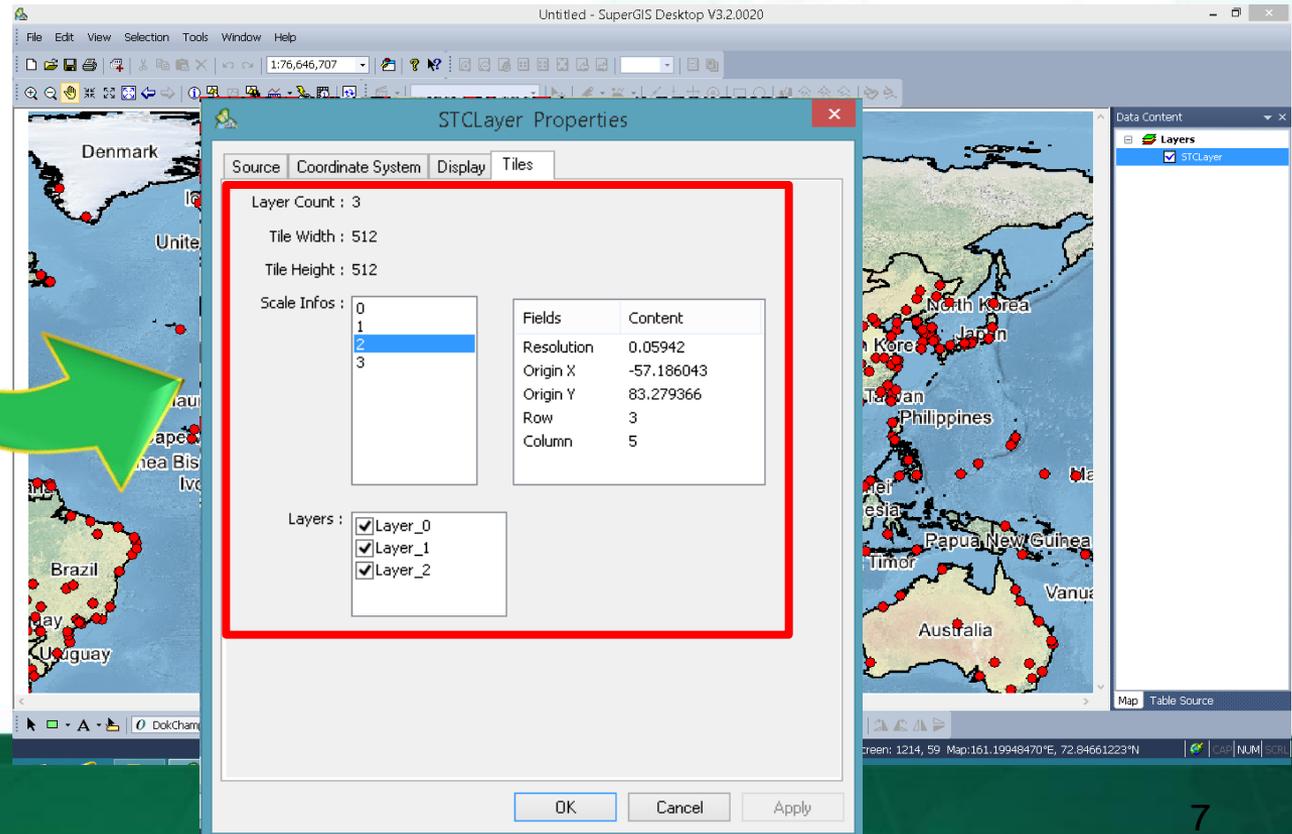
How to Use in Mobile Device

- Setup for the base map in your mobile device

Even Better!

.stc file
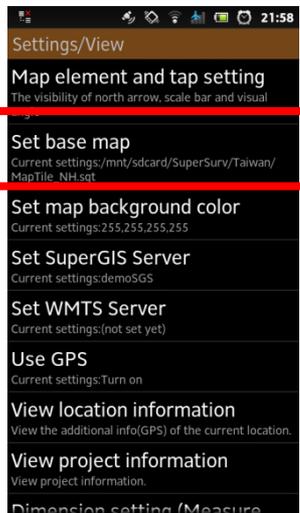
Case 02: Data Sharing in Spatial Database

- The **headquarter of chain store** wants to know the distribution of each location on the map

- Every store has some basic information, ex: address, phone number, total number of staffs, contact info of manager, even including the sales revenue every year
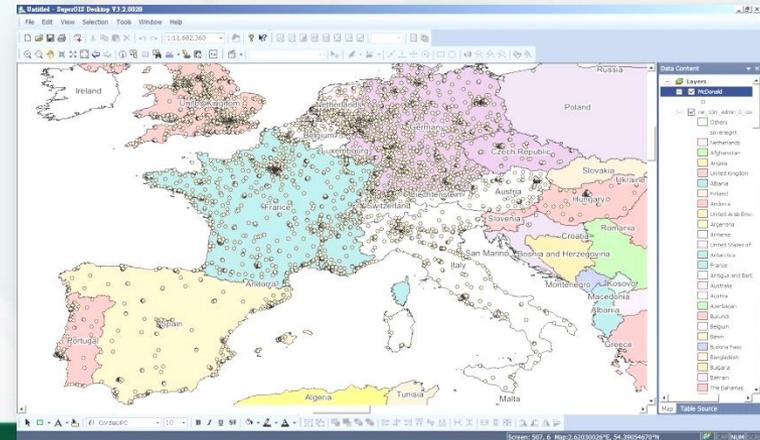
Case 02: Data Sharing in Spatial Database

- Import/export layers between spatial databases
- Spatial Database:
  - Microsoft SQL Server
  - Oracle Spatial 11g
  - PostgreSQL
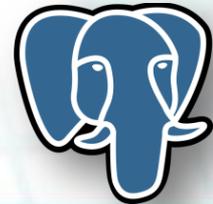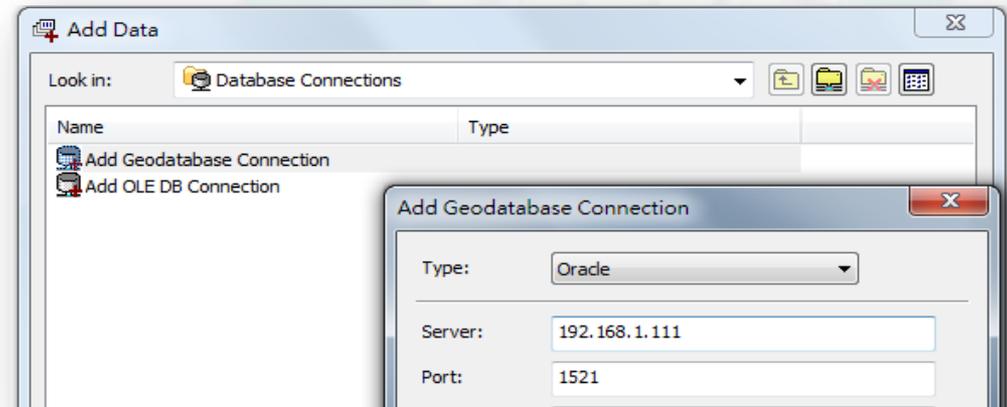
Add Data in SuperGIS Desktop

- Add the data from databases, and display in SuperGIS Desktop

1. Select the type
2. Server (IP)
3. Port
4. Database
5. Account
6. Password
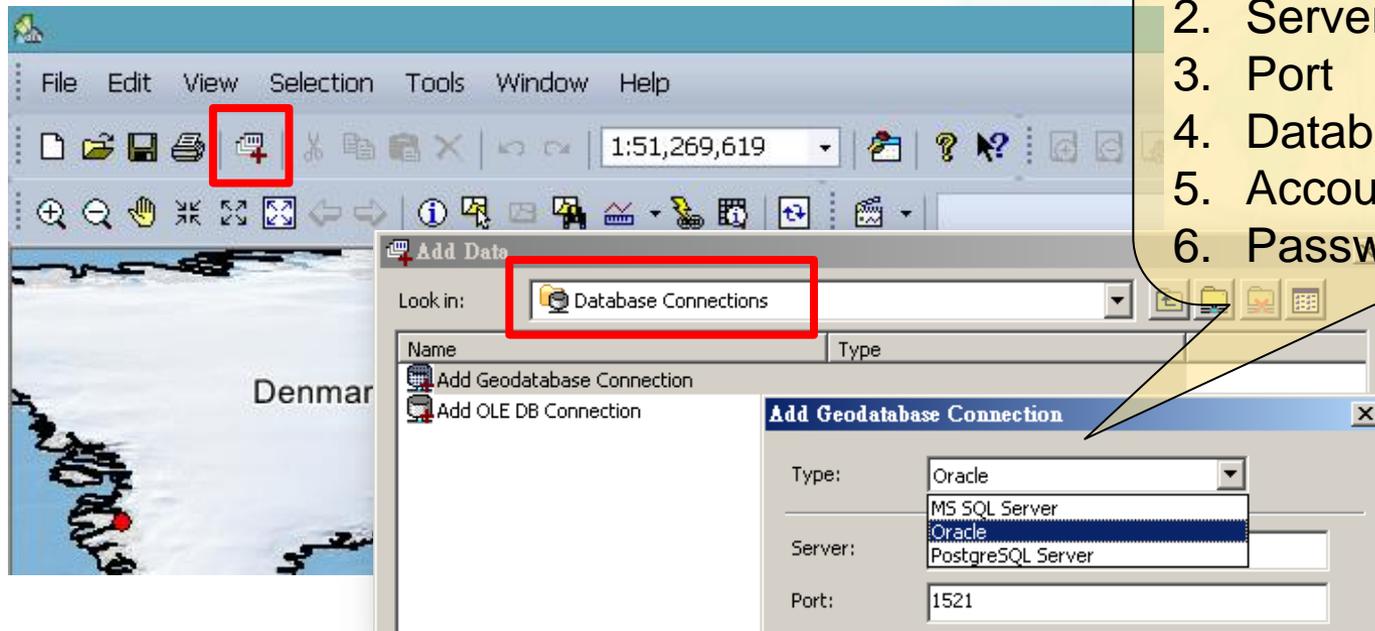
How to Connect with Databases

- Import/export data into/from databases by using SuperGIS DataManager
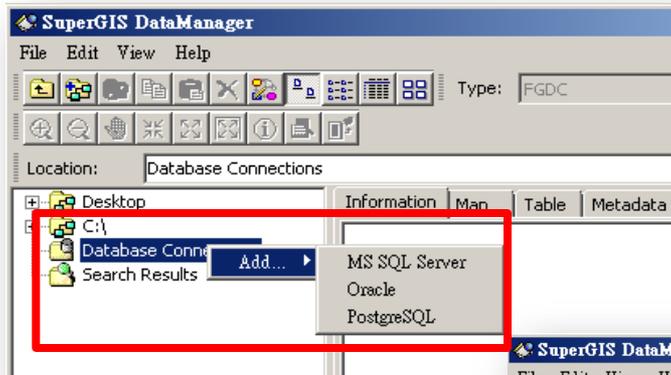
Export

Import

BREAKTIME: QUICK POLL – I
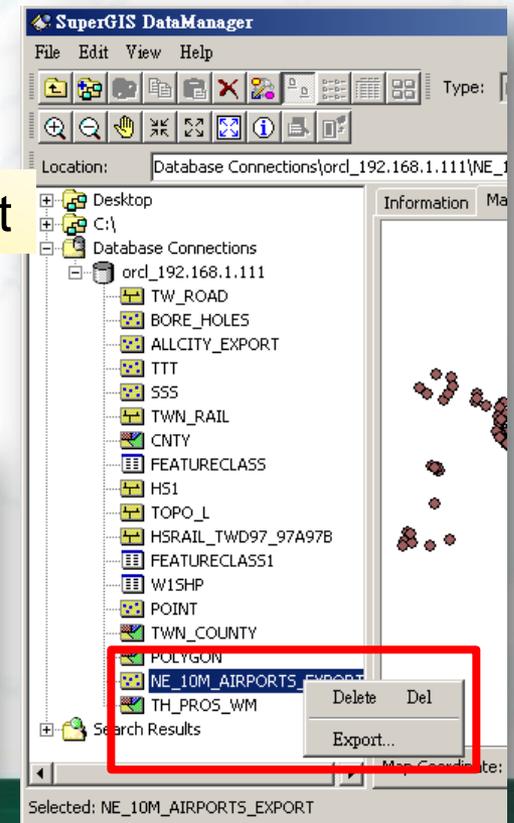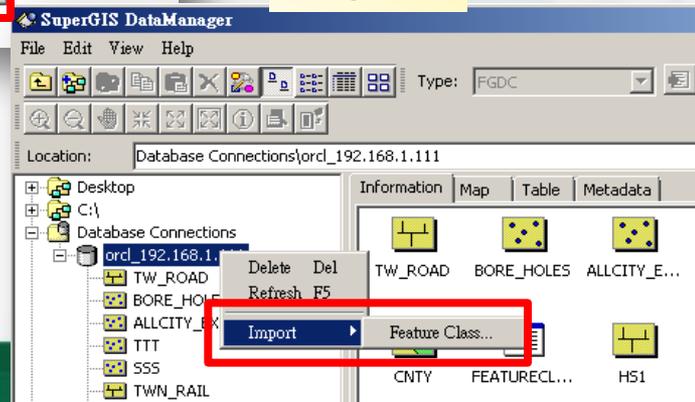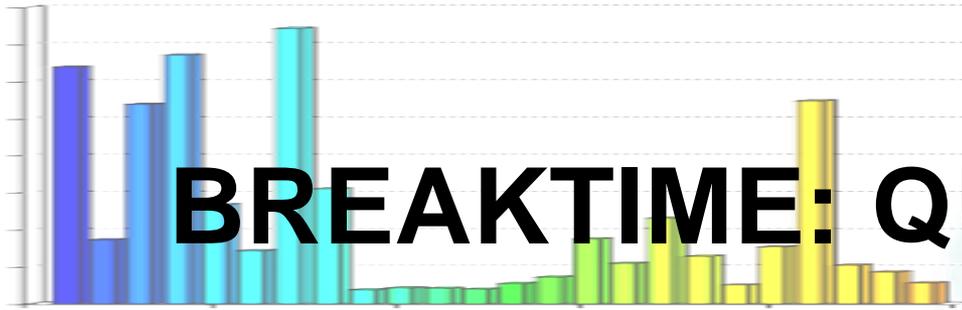
Subscribe **SupergeoTV** now!
http://www.youtube.com/user/supergeotv

Case 03: View GIS Data in PDF

- Create the maps for field tasks.

- You can use Geospatial PDF to view the GIS data, with coordinates.

Real-time GPS signal
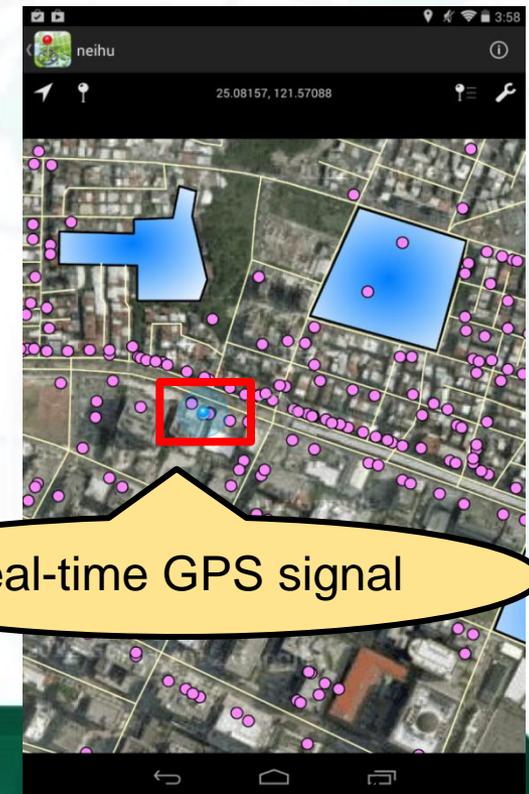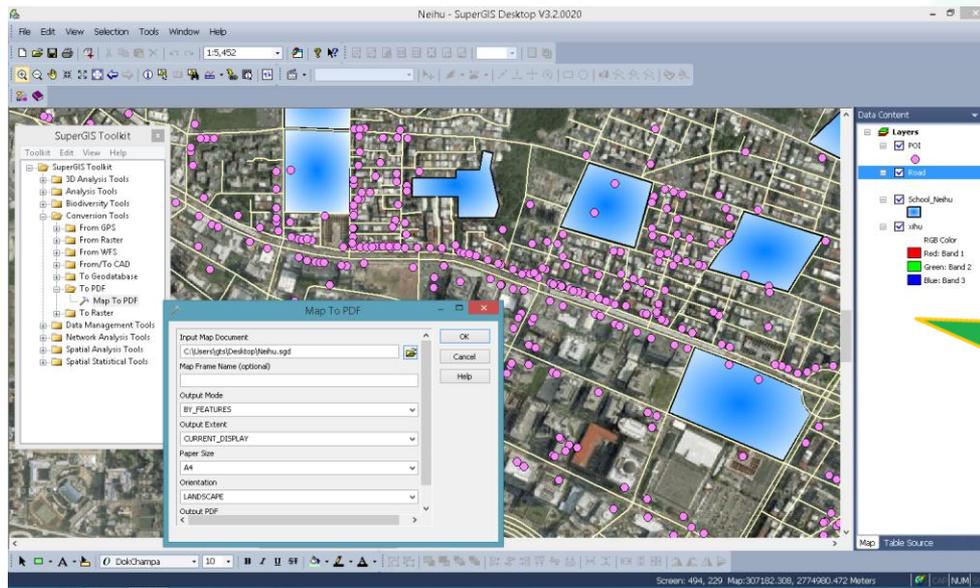
Export to Geospatial PDF

- Using SuperGIS Toolkit: Map To PDF
  - By Layers (Default)
  - By Features
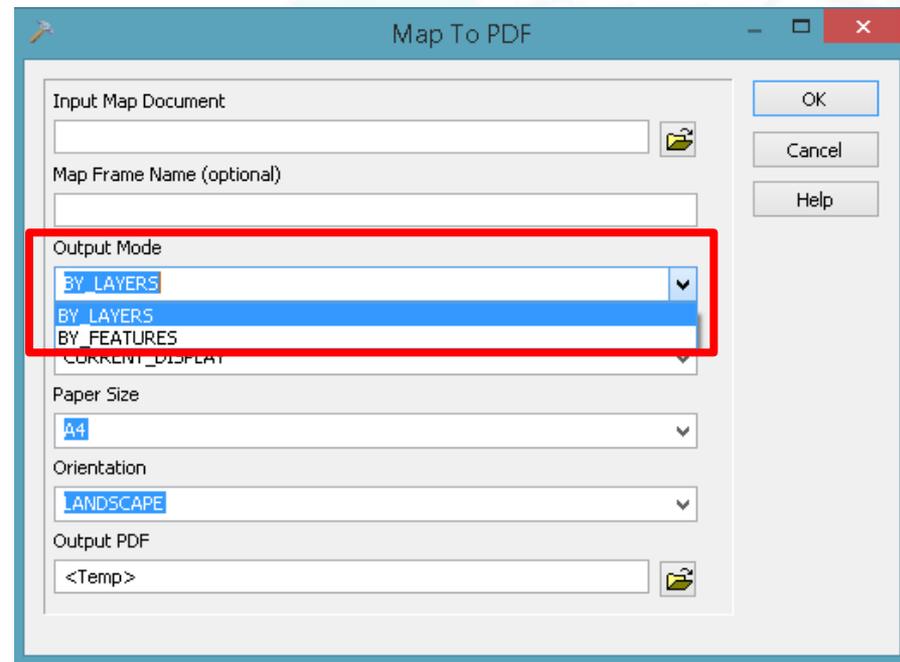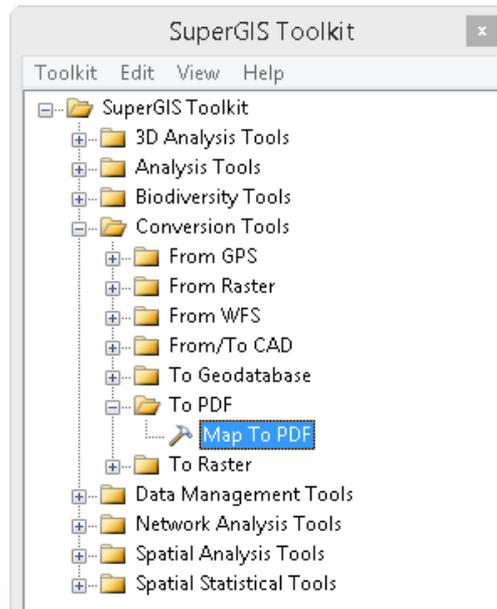
View the GIS Data in PDF

- View the Geospatial PDF by PDF reader

  - Query (Object Data Tool)

    - ✓ Attribute query

    - ✓ Spatial query

  - Measuring

    - ✓ Distance

    - ✓ Perimeter

    - ✓ Area

  - Geospatial Location
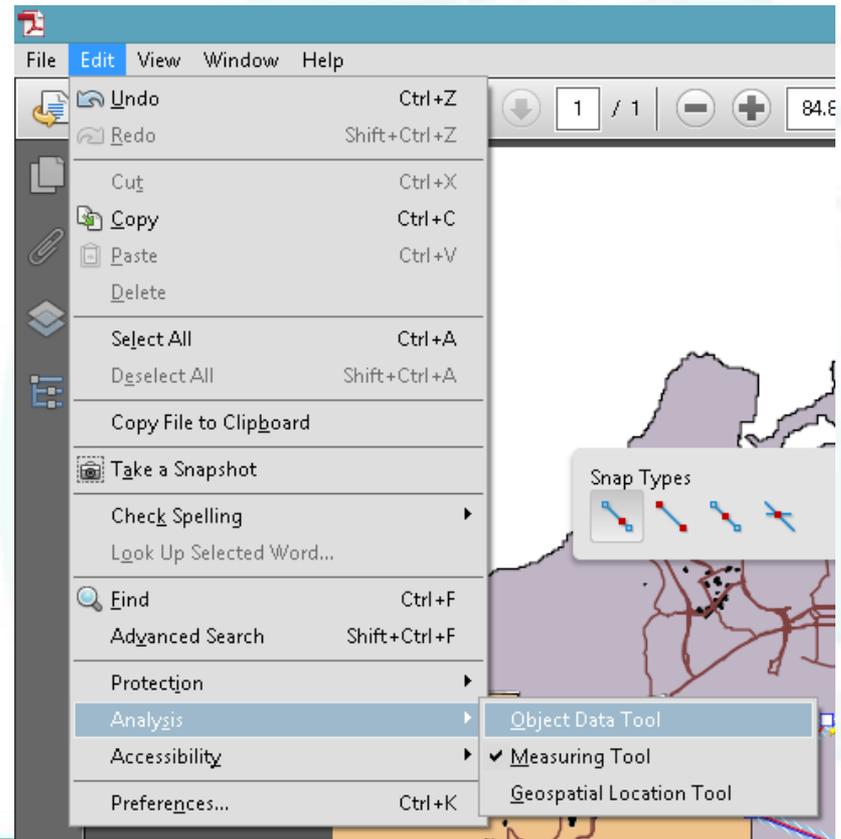
View the GIS Data in PDF

- View the Geospatial PDF by mobile device
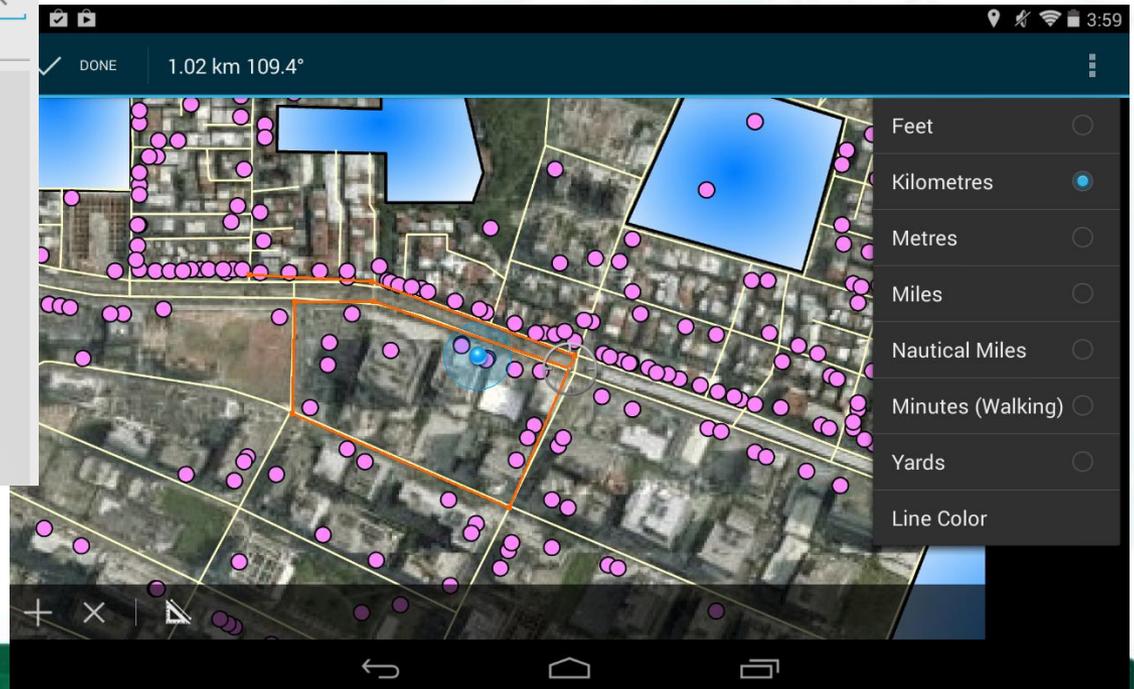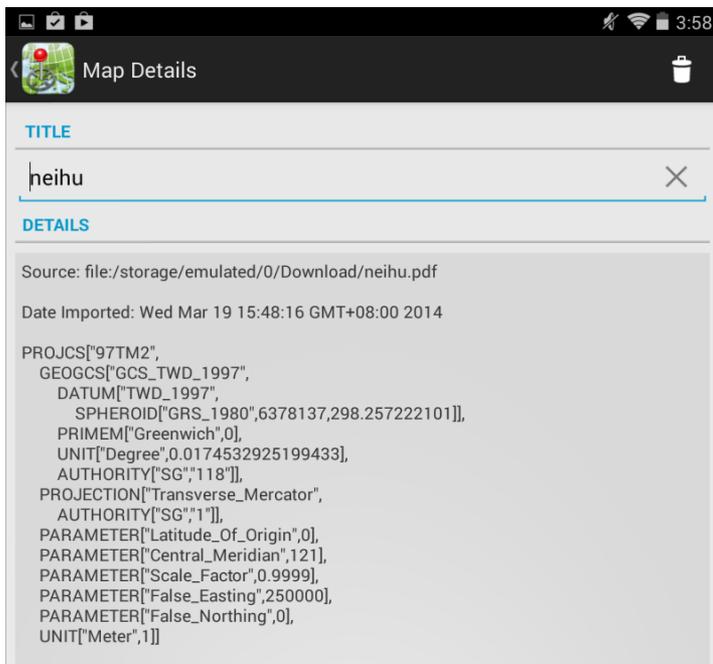
Case 04: Rectify on Image Data

- Gives raster data a correct position
    - Rotate
    - Shift
    - Scale…etc.
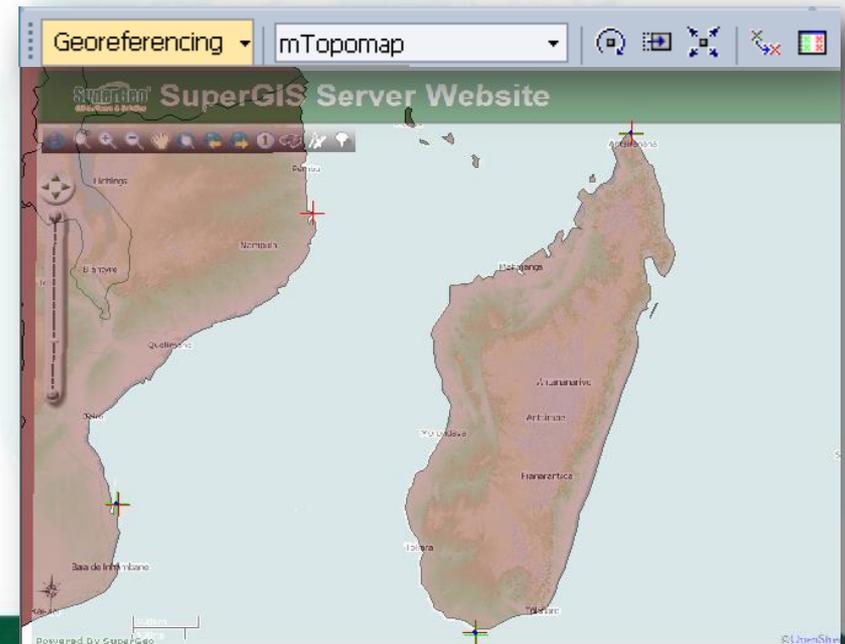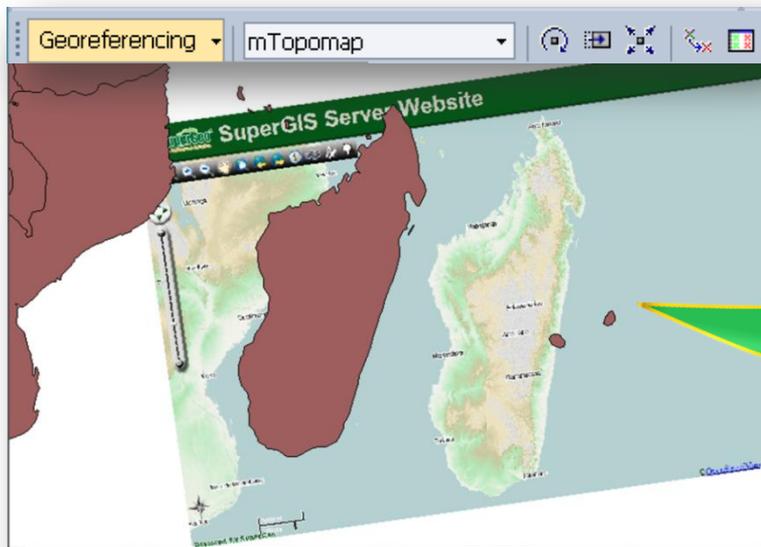
Georeferencing

- Rotate / Shift / Scale
- Flip / Rotate
- Auto Adjust
- Reset Transformation
- Control Point List
- **Rectify (at least 4 pairs of control point)**
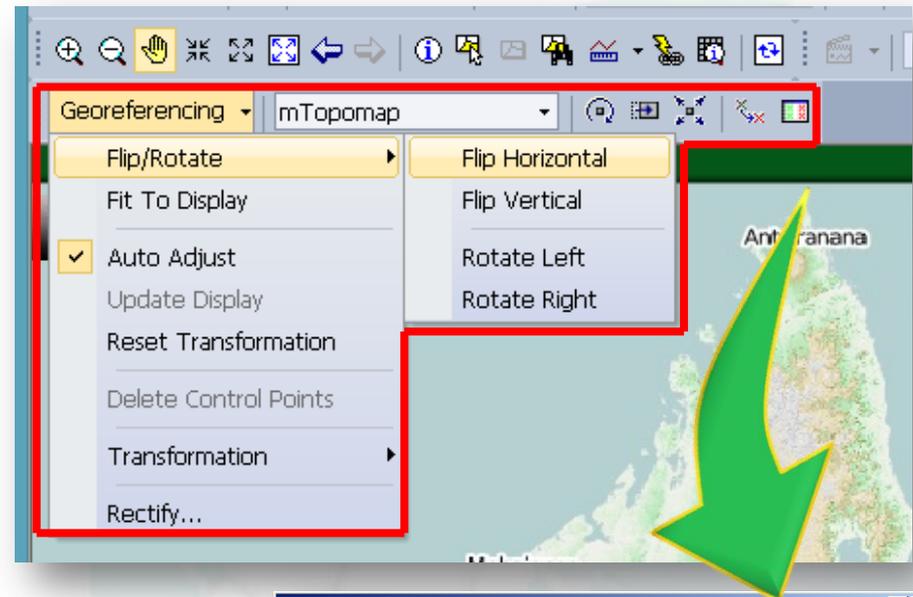
Start to Do Georeferencing

The raster data which needs to be given the correct coordinate
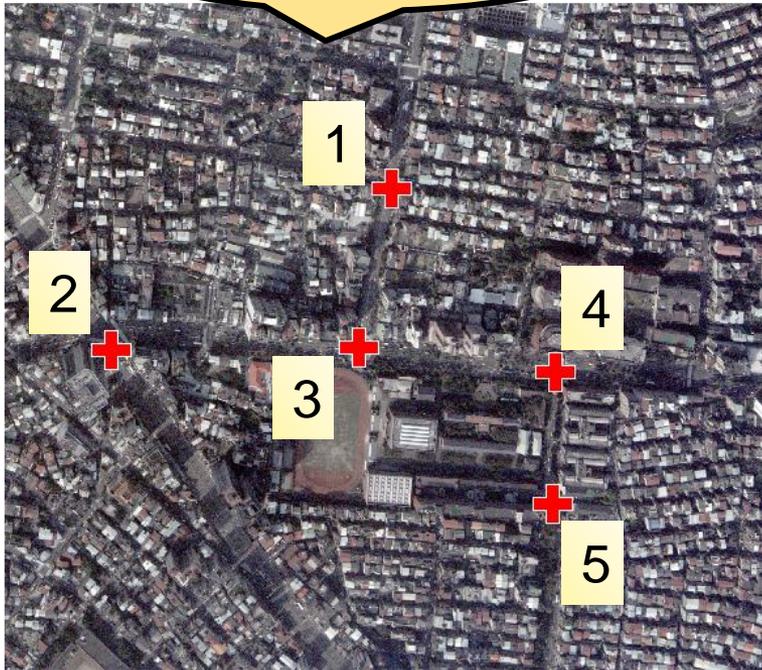
The GIS data with correct coordinate, which is used to be the comparison

BREAKTIME: QUICK POLL – II
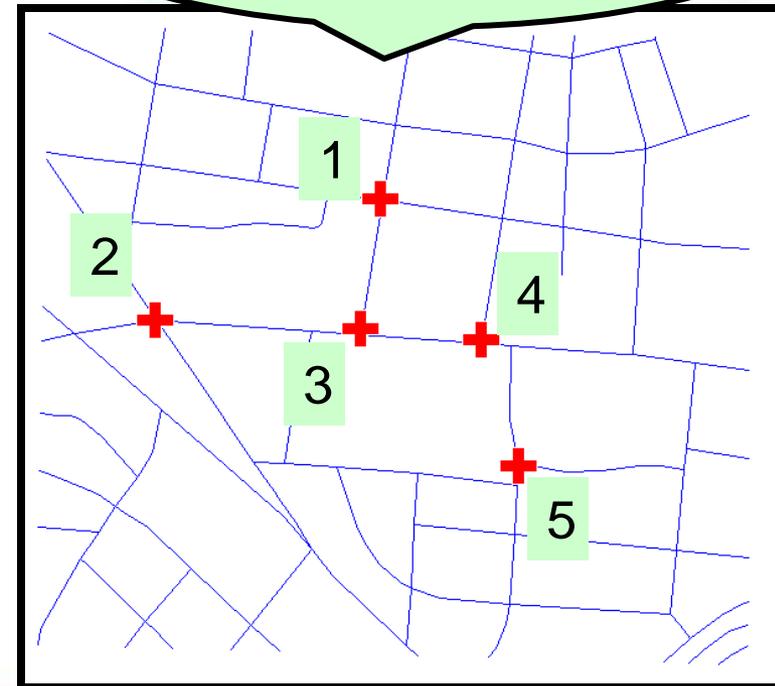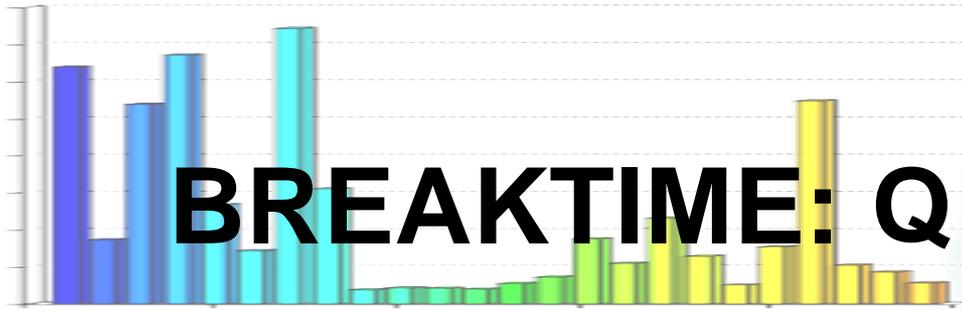
Subscribe **SupergeoTV** now!
http://www.youtube.com/user/supergeotv

Case 05: Precise Mapping

- Scenario: A surveyor needs to conduct a survey plan in the city for the government.

- The paper work recording every detail, ex: length, direction…etc., and you need to digitize GIS data on your computer.

Case 05: Precise Mapping

- Advanced Editor
  - More tools for smart editing, ex: Copy Tools
- COGO
  - Construct the line with direction and distance

Cul-De-Sac

OffsetLine

COGO Area

Proportionally

Auto Intersection
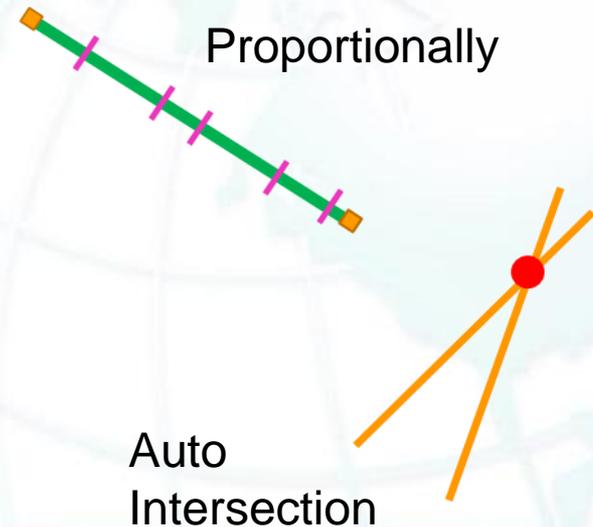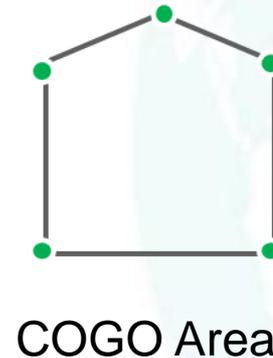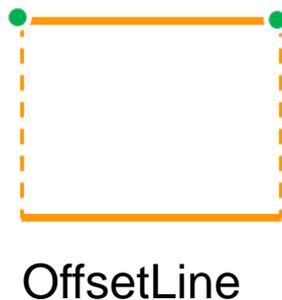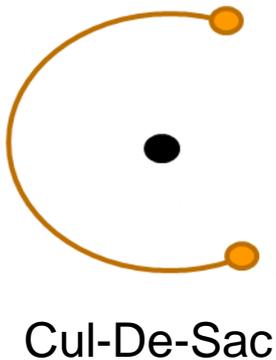
Traverse

- Create the next vertex with direction and distance

Direction-Distance   Angle-Distance
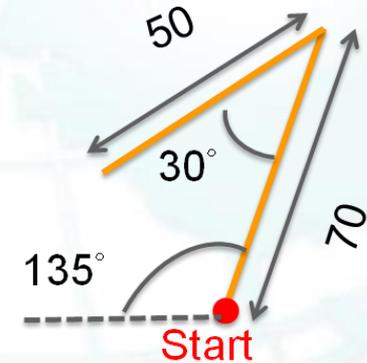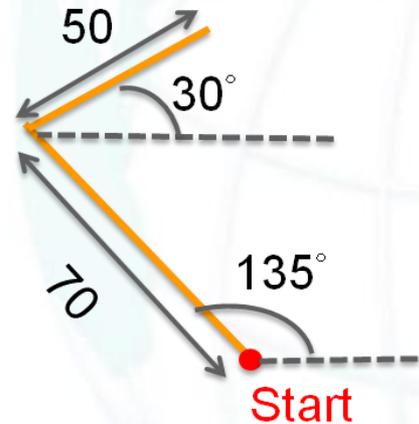
Offset Line

- Create the parallel line by input the offset and length
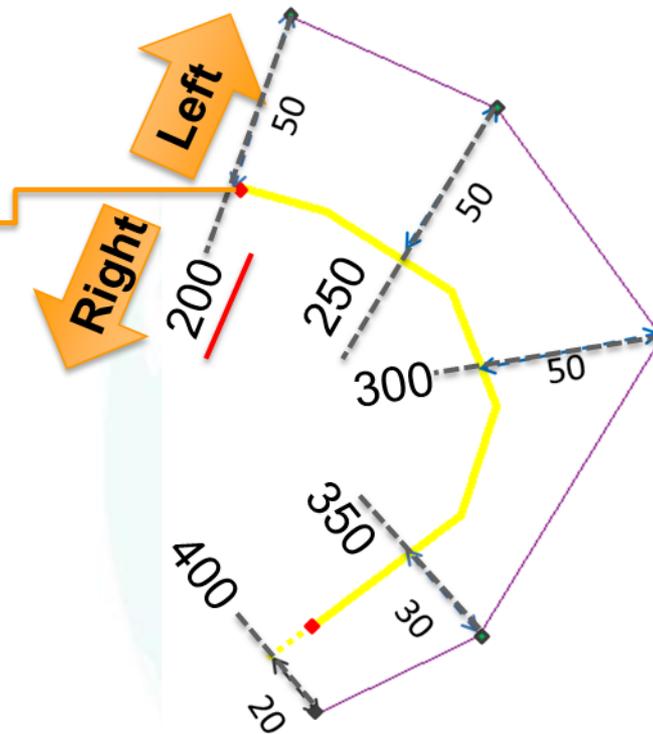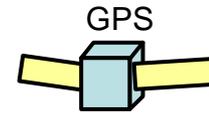
Point to Line

- Convert the points to line
  - The collected survey points can be converted as a line
  - Save the time to digitize
  - Increase the accuracy of the line that is generated from the points

GPS

(x1,y1)
(x2,y2)
(x3,y3)
(x4,y4)
(x5,y5)
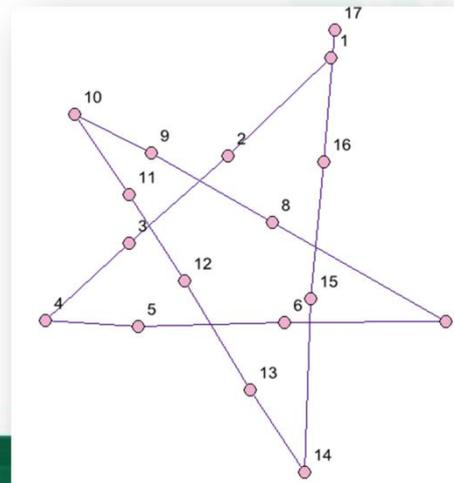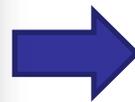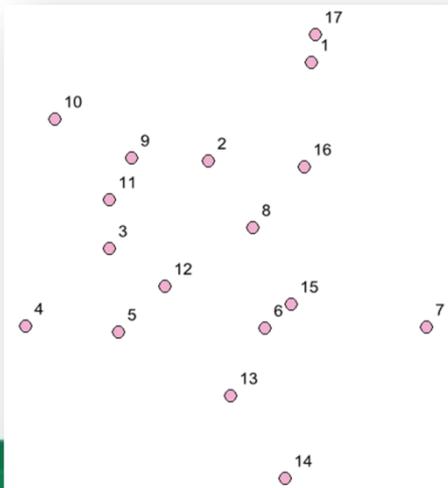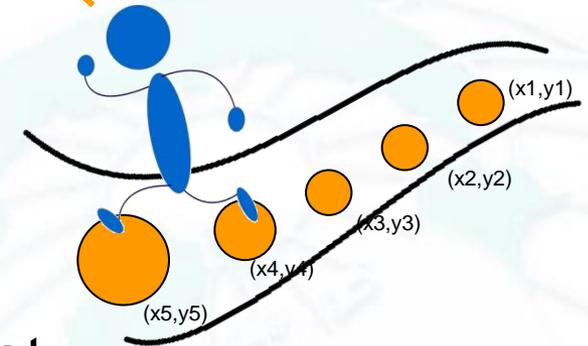
Connecting points to a line by their FID order

Cul-De-Sac

- Creates a cul-de-sac from a street centerline
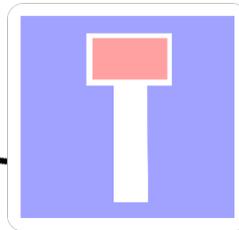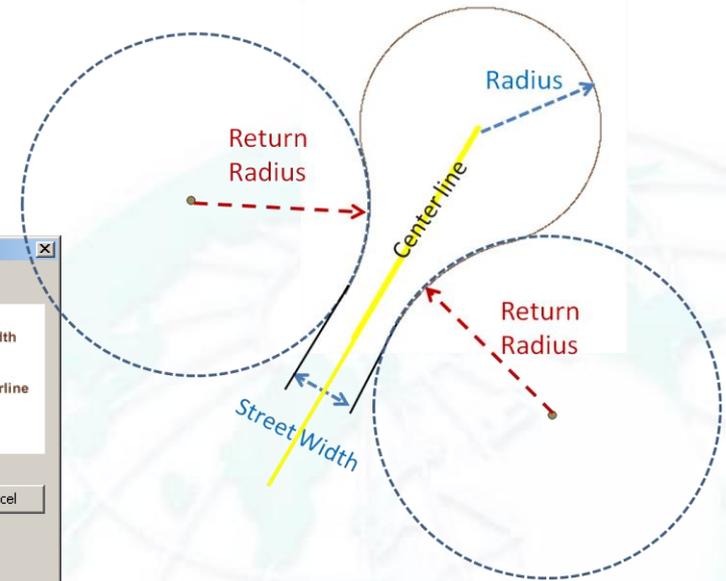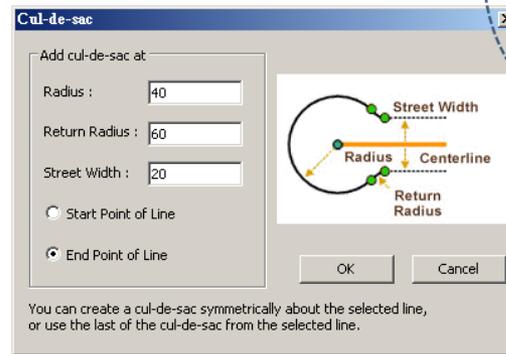
The other functions…

- ## Advanced Editor:
  - Copy Tool
  - 2-Point Line
  - Split Proportionally
  - Point to Line

- ## COGO:
  - COGO Area
  - COGO Report
  - Split into COGO lines
  - …etc.
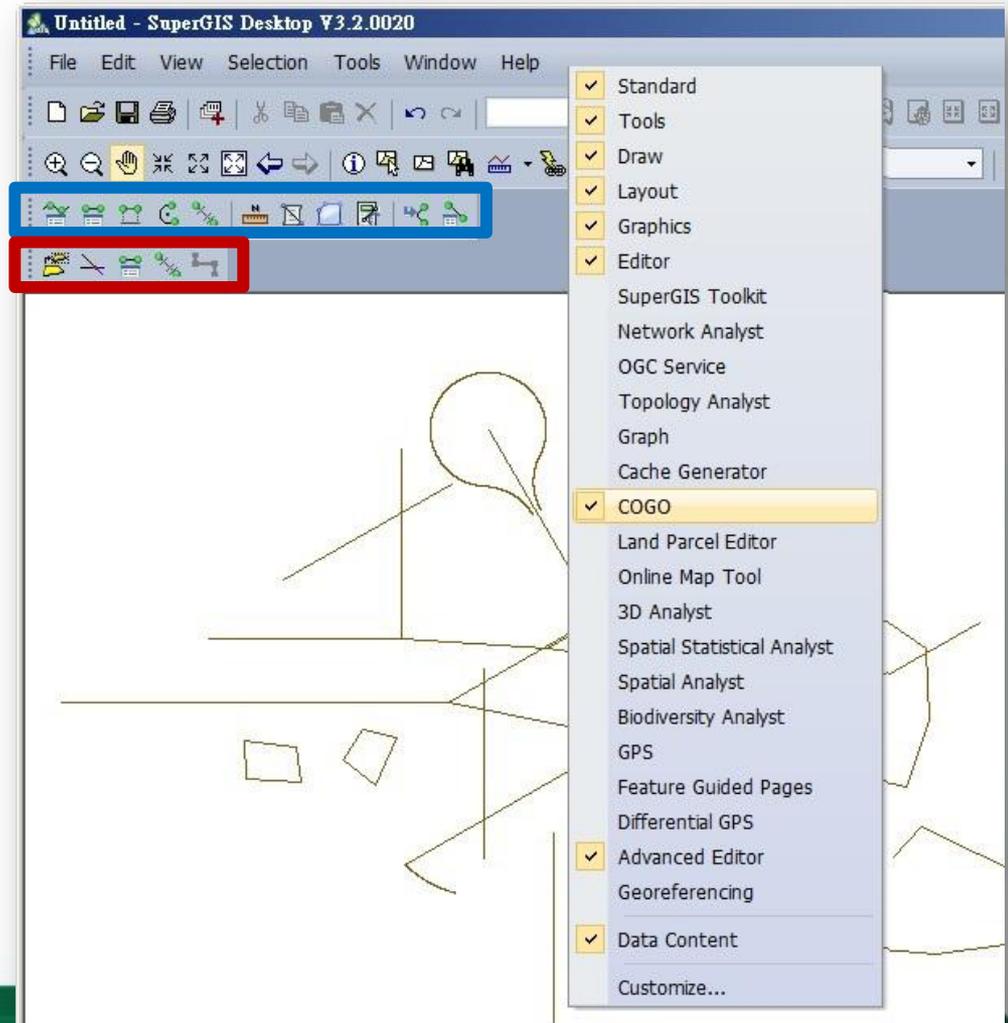
Case 06: Produce Map Atlas

- The map publisher wants to make the atlas of Thailand.
- Each province has to be shown on the same layout one by one
  - Multiple Map Frames
  - Feature Guided Pages

Supergeo®
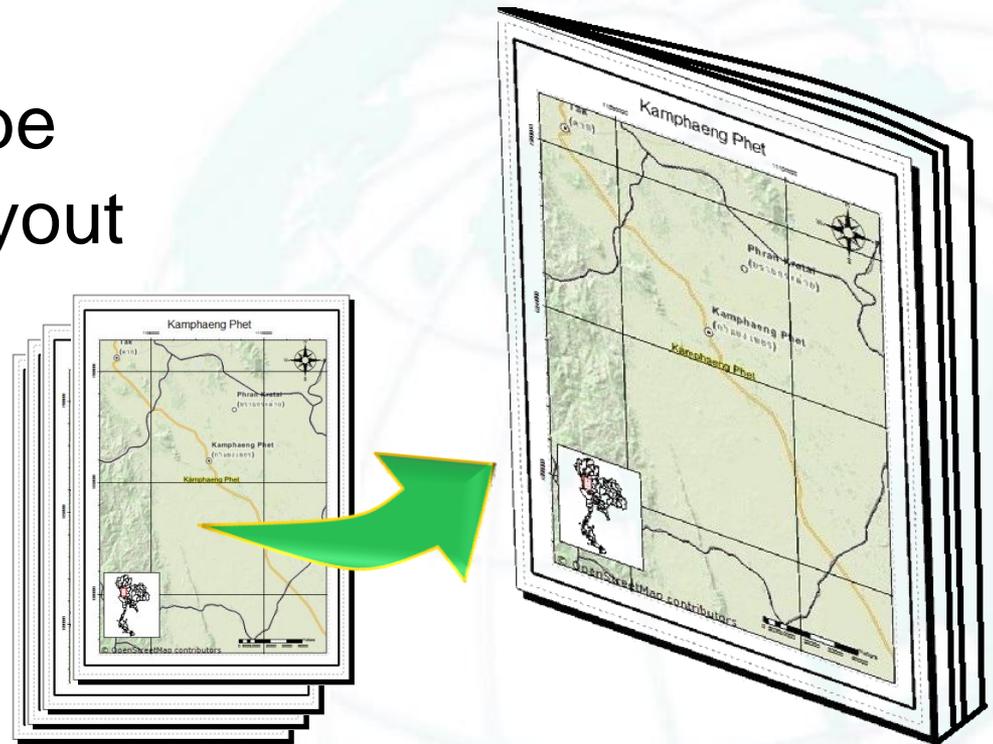
- **Multiple Map Frames**

  – Display different area at the same time, even base on different coordinate systems

  – Create the **indicator** and show the current extent automatically
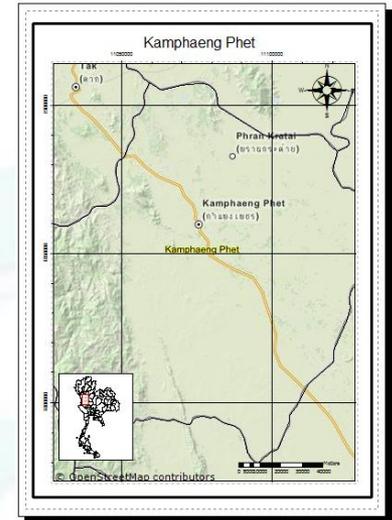
- **Feature Guided Pages**

  – Show **each of the targets** in the same template of layout view

  – Print out all the targets in each page, into a map atlas
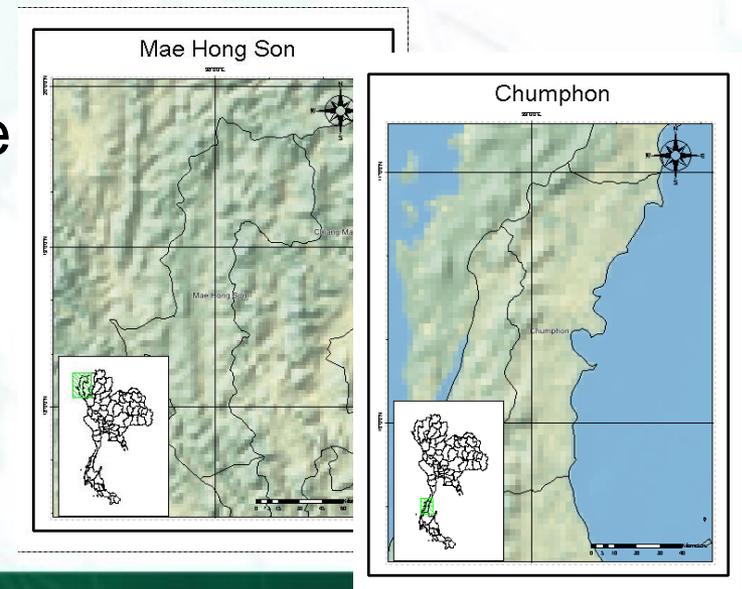
Multiple Map Frames

- Display different area at the same time
- Create the **indicator** and show the current extent
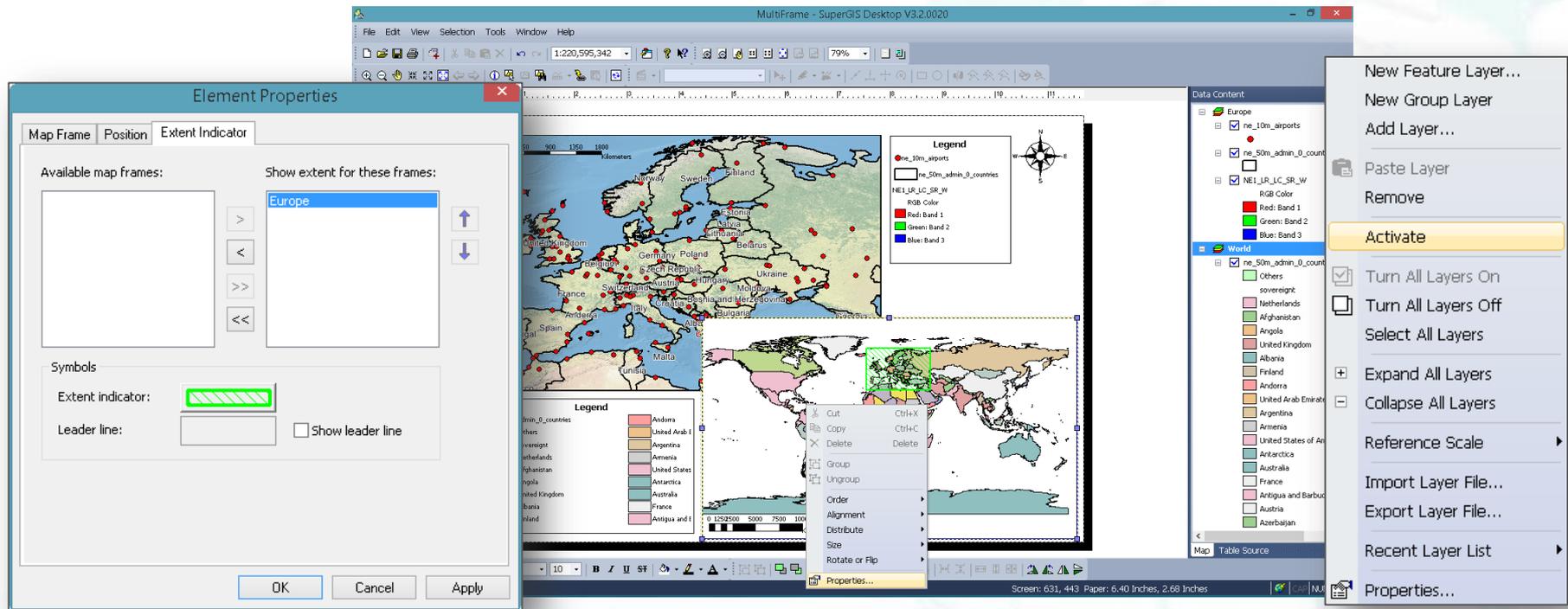
Feature Guided Pages

- Assign for the map frame, layer, and specify the field and sorting field
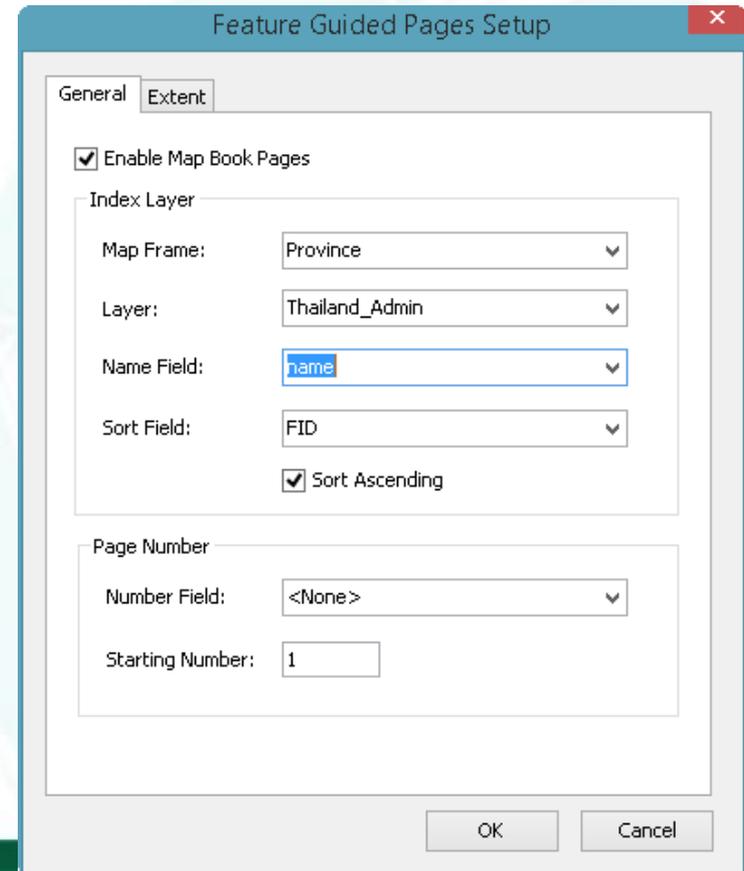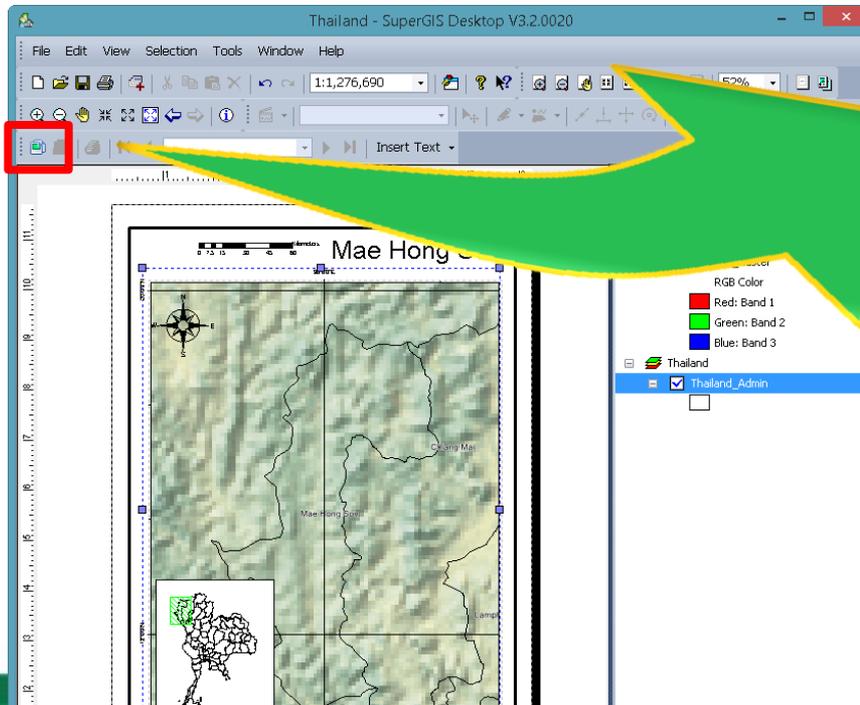
Feature Guided Pages

- Start to produce your own map atlas
- Printer setting

Q&A Time
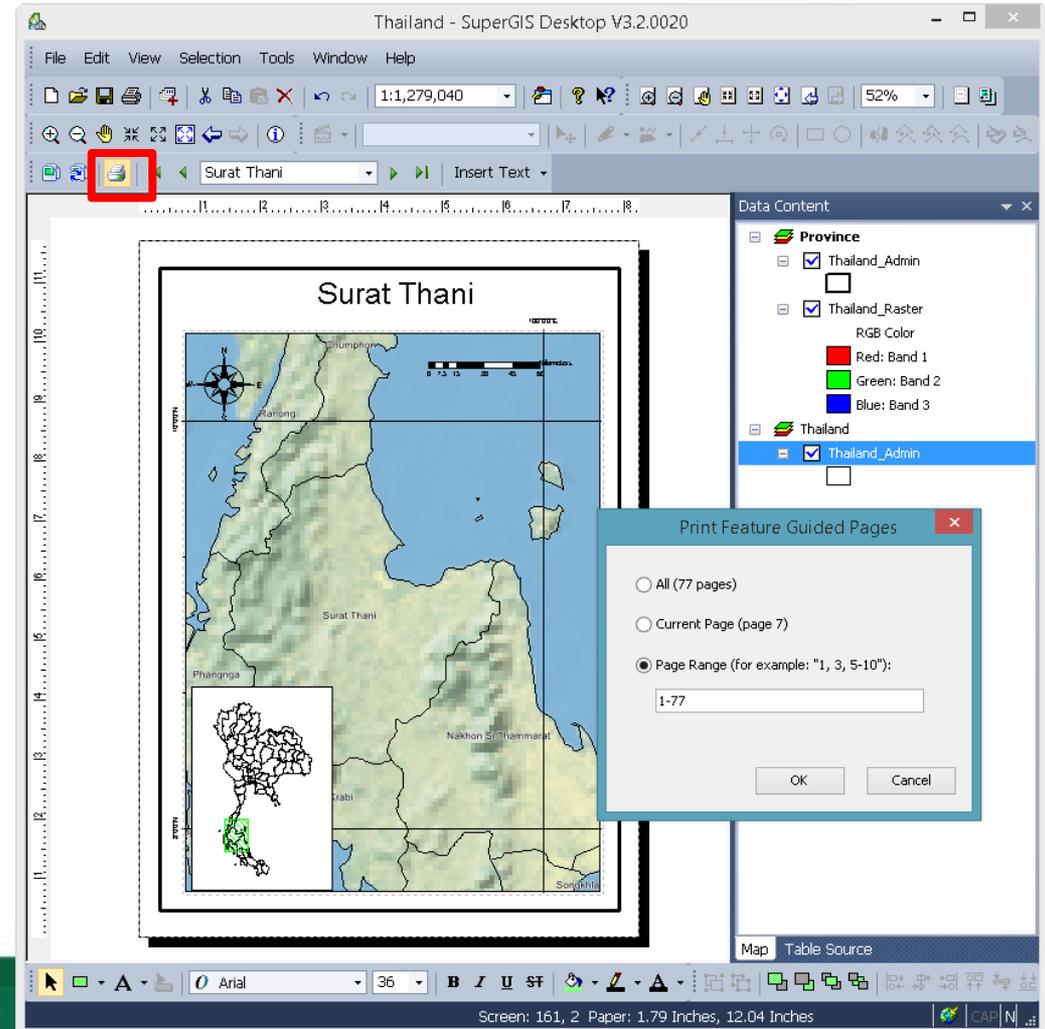
Contact us:

http://www.supergeotek.com

Email: staff@supergeotek.com

You Tube Subscribe **SupergeoTV** now!
http://www.youtube.com/user/supergeotv

You Tube TW

Upload   Sign in

Supergeo

SuperGIS® Mapping Software
Develop & Manage Your Solutions with
In-depth Geographic Information and Analysis

supergeotv

Subscribe   99