# SuperGIS Webinar

Inspect and Update in Real-Time – A SuperGIS Utility Solution

# Presenters

Host

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Speaker

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# Questions & Comments

- Share your comments or questions
- Or, drop us an email staff@supergeotek.com


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# Quick Poll I

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# SuperGIS Products

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## Server GIS

SuperGIS Server

SuperGIS 3D Earth Server

## Cloud GIS (TW Only)

SuperGIS Online

- Data Services
- Excel Add-in
- Address Locator
- Statistical API

## Desktop GIS

SuperGIS Desktop

Analyst Extensions

- Spatial
- Spatial Statistical
- 3D
- Biodiversity
- Network
- Topology

Add-ons

- Image Analyzer
- LiDAR Tool
- Mapnote Tool
- Dimension Tool
- Temporal Slider
- Cache Generator

and more...

## Developer GIS

SuperGIS Engine

SuperGIS Mobile Engine

## Mobile GIS

SuperSurv (Android/iOS)

SuperPad

SuperVeyor (Hardware bundle)

Forestry APP (Android)

SuperGIS Mobile Tour (Android)

Mobile Cadastral GIS (TW only)

# Overview of SuperPad

- Professional mobile GIS app
  - GIS data collecting, editing & managing
  - Standalone & ready-to-use on Windows Mobile & Windows OS
- Better Survey Experience
  - Elevate data precision with external GNSS receiver
  - Activate post processing or NTRIP extension for better data quality

# SuperPad Key Features

## GNSS

- Record track & display on the map
- Stake out surveying point (Waypoint)
- Apply NTRIP service*
- External GNSS receiver*
- Post processing data*

## GIS

- Offline GIS data editing
- Abundant basemaps (OSM, Mr.SID, JPEG2000)
- Query/identify/measure
- Cloud service (OGC/SuperGIS Server)
- On-the-Fly projection
- Relational Table


SuperGIS Webinar
Inspect and Update in Real-Time – A SuperGIS Utility Solution

# Scenario

Gasoline company needs a website to show the utility sites and mark the location as patrolmen reported an facility problem.


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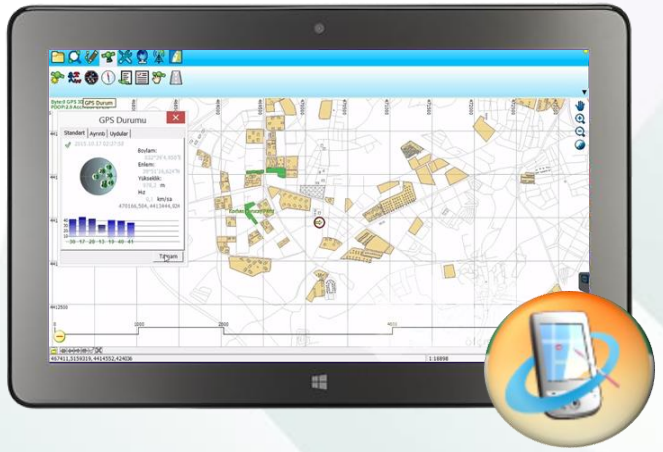
# Smarter Way to Collect Data

Use SuperPad on Windows OS device (laptop/tablet) with external GNSS receiver to collect GIS data.

# Solution with Smart Mobile GIS

- Abundant GIS toolsets
- Integrate modern advanced GPS and GIS technologies
- Collect, edit, and access data in sub-meter precision

**GNSS** + **GIS Tech**

# In Today’ s Webinar

Activate NTRIP solution to do positioning

Establish an online utility map with **SuperGIS Server**

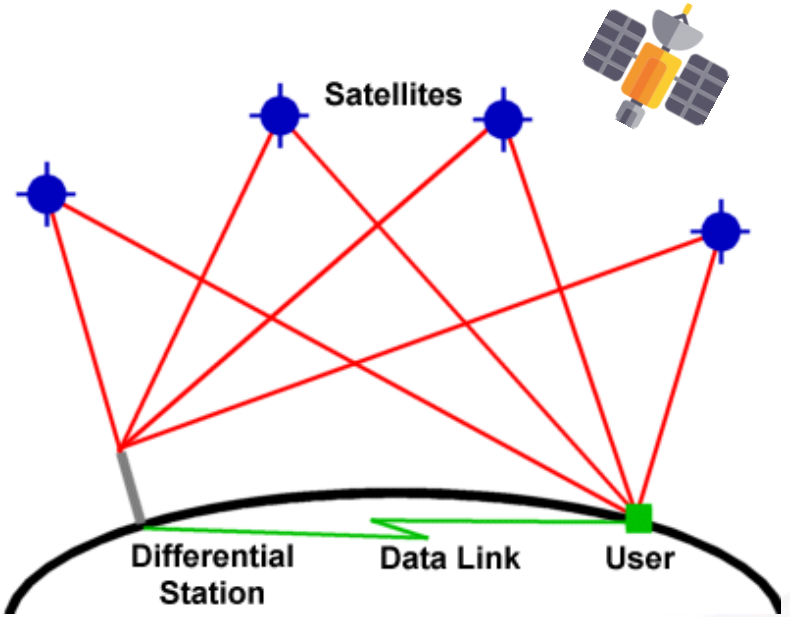
Synchronize collected data to the utility map in real-time

Use relational table to manage data more easily

# Activate NTRIP Solution

# Past

- **DGPS**
  - 1-day delayed
  - Download the correction data
  - Run post processing (desktop)
  - Accuracy > 1m



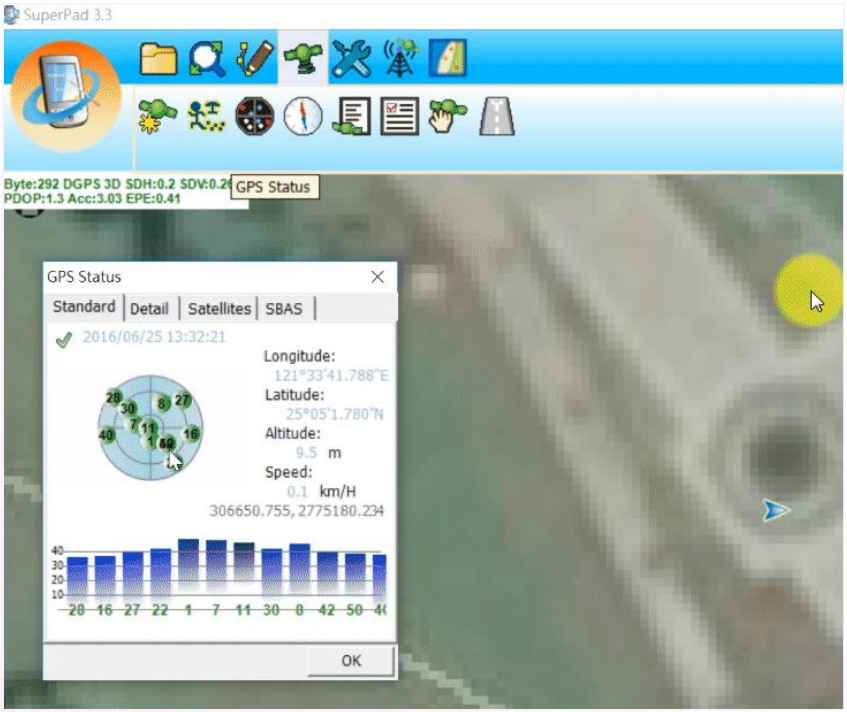

IGS INTERNATIONAL GNSS SERVICE

# Now

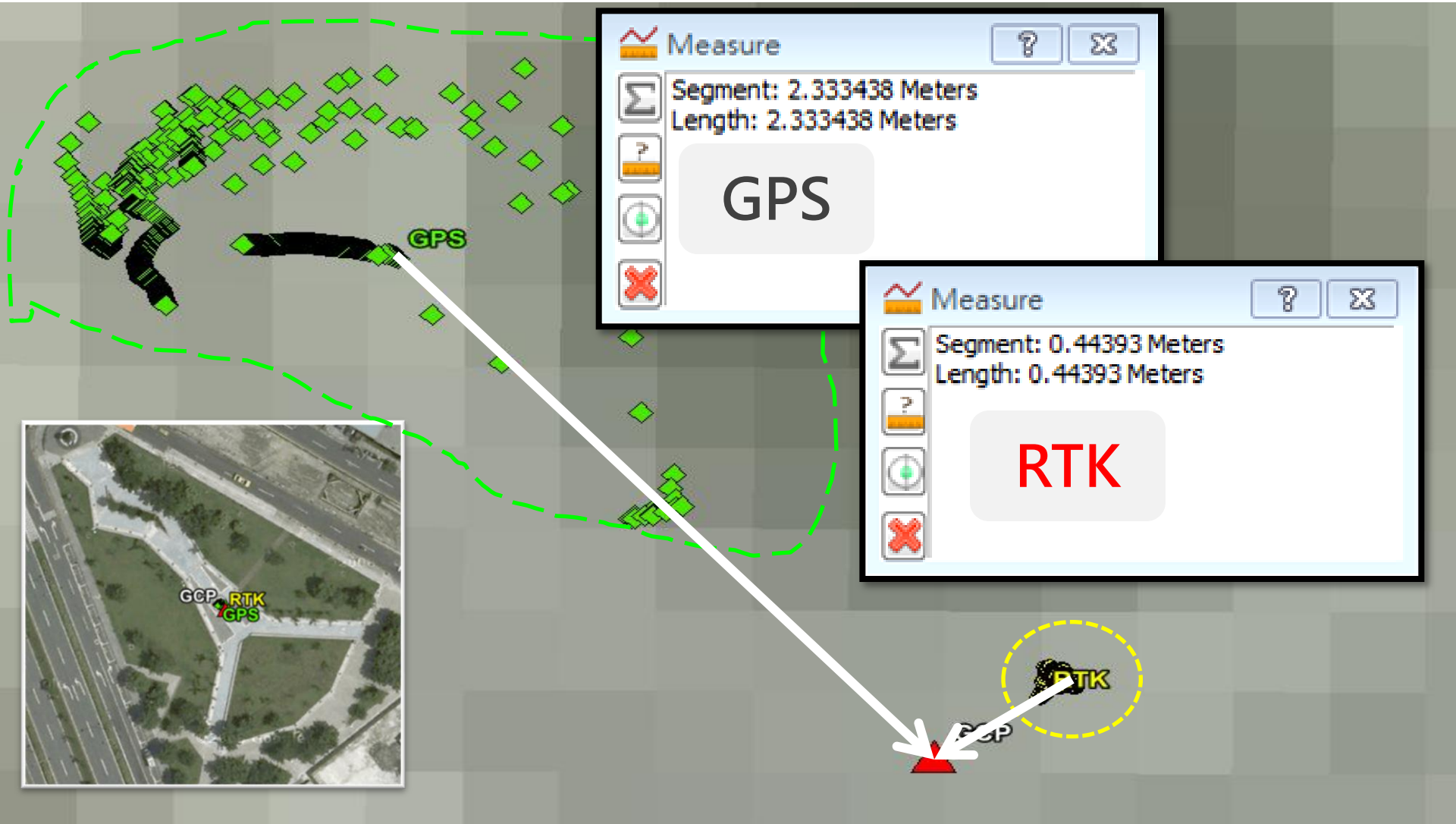
- **NTRIP**
- Networked Transport of RTCM via Internet Protocol
- Real-time GPS correction
- Accuracy ~ sub-meter

# Sub-meter Precision

- Use SuperPad + V100 via NTRIP and RTK tech
- Bringing your field work into sub-meter level




# Accuracy Test



# Accuracy Test

## GPS

**2drms**

| | | | |
|---|---|---|---|
| Horizontal | 4.978m | East-West | 3.803m |
| Altitude | 1.672m | North-South | 3.212m |

**Average**

| | | | |
|---|---|---|---|
| Latitude | 25?5'01.825433"N | Altitude | 8.8207m |
| Longitude | 121?3'41.729079"E | DGPS | 95.42% |

**Peak of error**

| | | |
|---|---|---|
| Horizontal | 2.946m | 16/06/25 05:10:32(UTC) |
| Altitude | 2.704m | 16/06/25 05:10:28(UTC) |

**Statistics**

| | Average | Minimum | Maximum |
|---|---|---|---|
| HDOP | 0.798 | 0.600 | 0.900 |
| VDOP | 1.127 | 0.900 | 1.500 |
| PDOP | 1.399 | 1.100 | 1.800 |
| Used Sat | 15.7(9.2) | 14(8) | 24(13) |

**Difference between average and true**

| | | | |
|---|---|---|---|
| Horizontal | 2.462m | East-West | -1.875m |
| Altitude | -0.589m | North-South | 1.595m |

## RTK

**2drms**

| | | | |
|---|---|---|---|
| Horizontal | 0.819m | East-West | 0.660m |
| Altitude | 0.120m | North-South | 0.485m |

**Average**

| | | | |
|---|---|---|---|
| Latitude | 25?5'01.781458"N | Altitude | 9.4383m |
| Longitude | 121?3'41.807756"E | DGPS | 100.00% |

**Peak of error**

| | | |
|---|---|---|
| Horizontal | 0.440m | 16/06/25 05:52:01(UTC) |
| Altitude | 0.239m | 16/06/25 05:37:13(UTC) |

**Statistics**

| | Average | Minimum | Maximum |
|---|---|---|---|
| HDOP | 1.217 | 0.800 | 2.300 |
| VDOP | 1.816 | 1.000 | 4.300 |
| PDOP | 2.220 | 1.300 | 4.800 |
| Used Sat | 11.4(5.4) | 8(4) | 14(6) |

**Difference between average and true**

| | | | |
|---|---|---|---|
| Horizontal | 0.409m | East-West | 0.329m |
| Altitude | 0.028m | North-South | 0.242m |

# DEMONSTRATION

NTRIP Setting

# Quick Poll II

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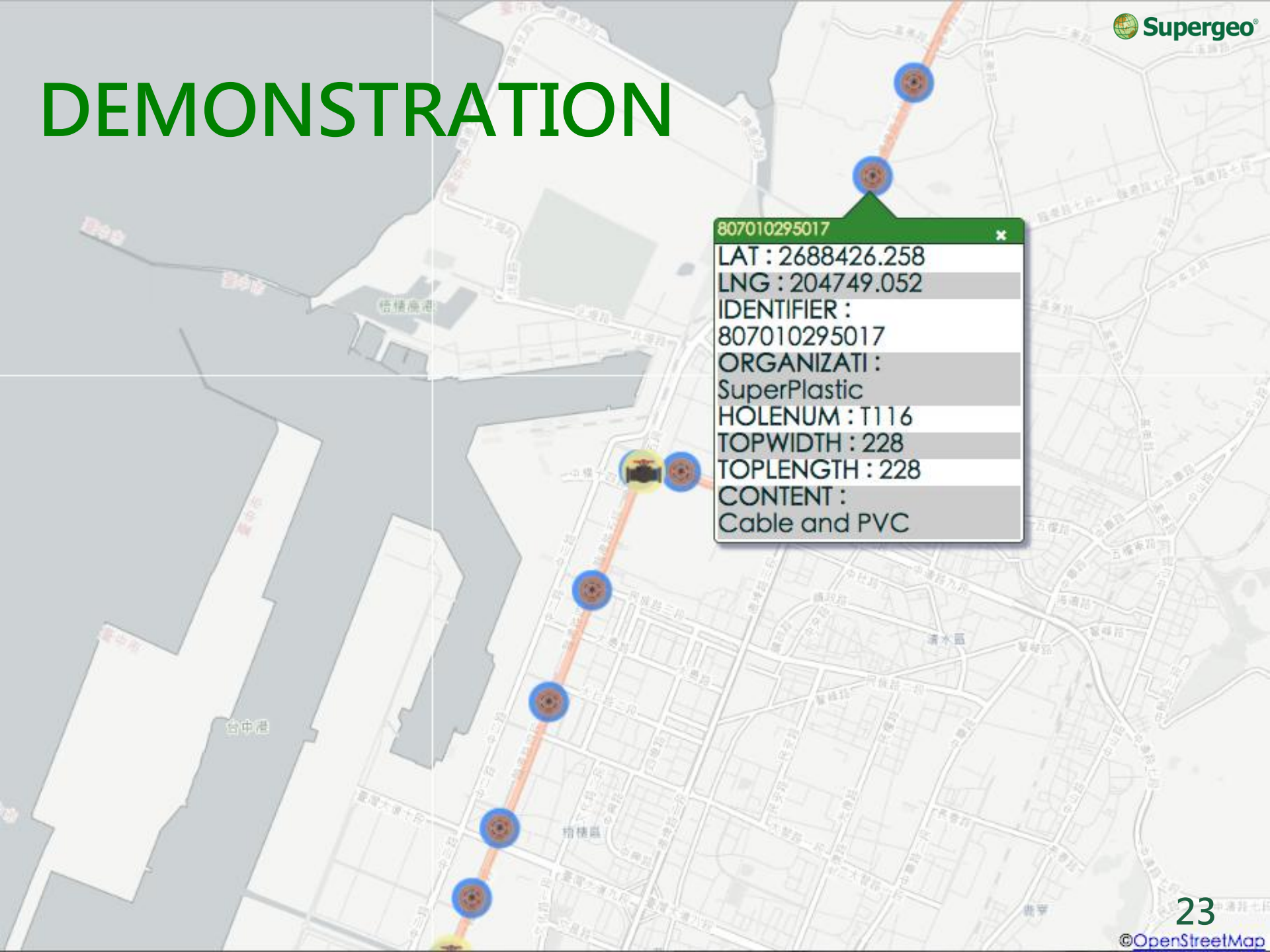
# Establish Online Map with SuperGIS Server

# Visualization

1. Manage the raw data and design the map by **SuperGIS Desktop** and save as a *.sgd.
2. Publish the map via **SuperGIS Server**
3. Check the map in browsers or mobile devices

# DEMONSTRATION



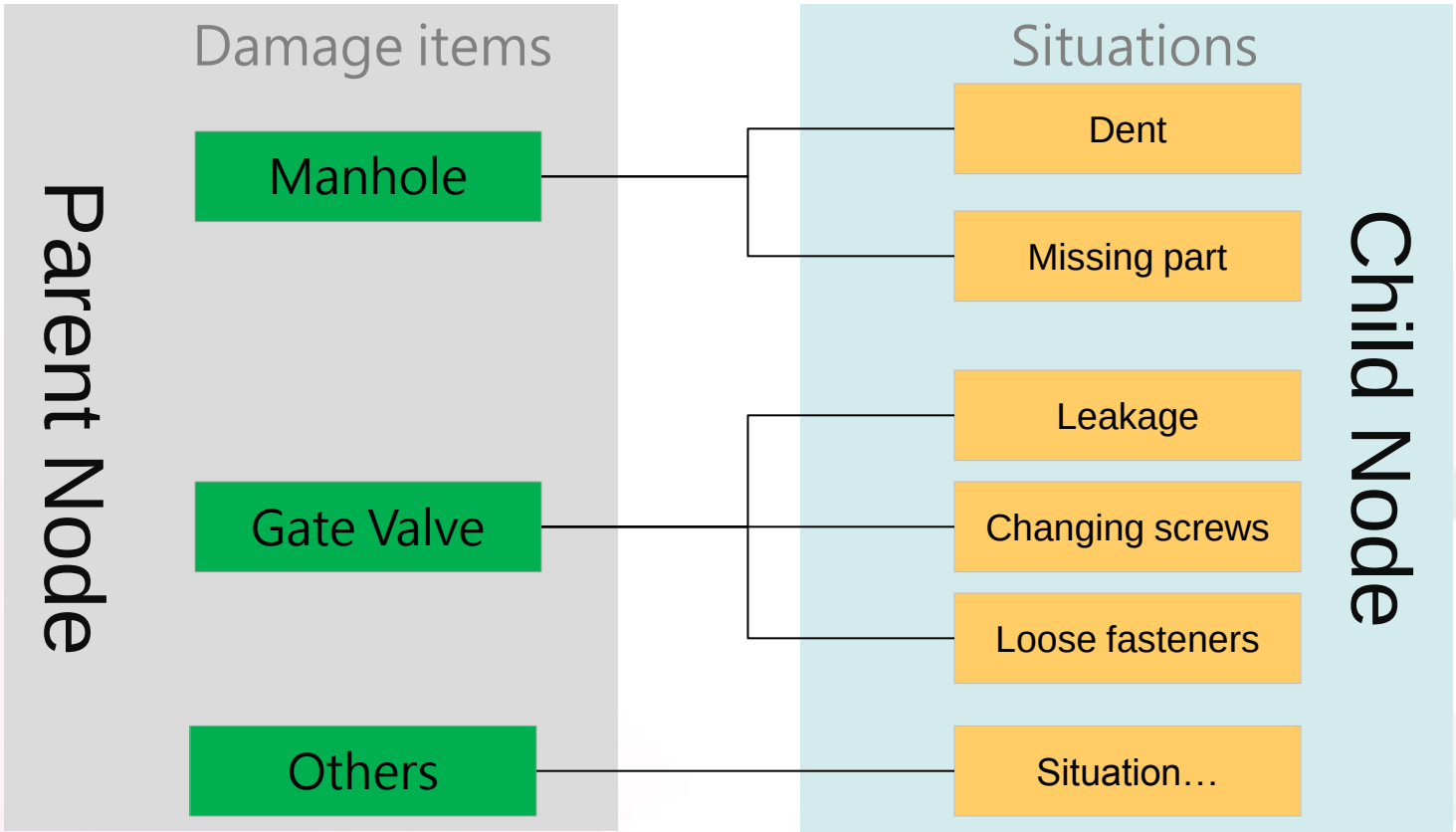
Sync

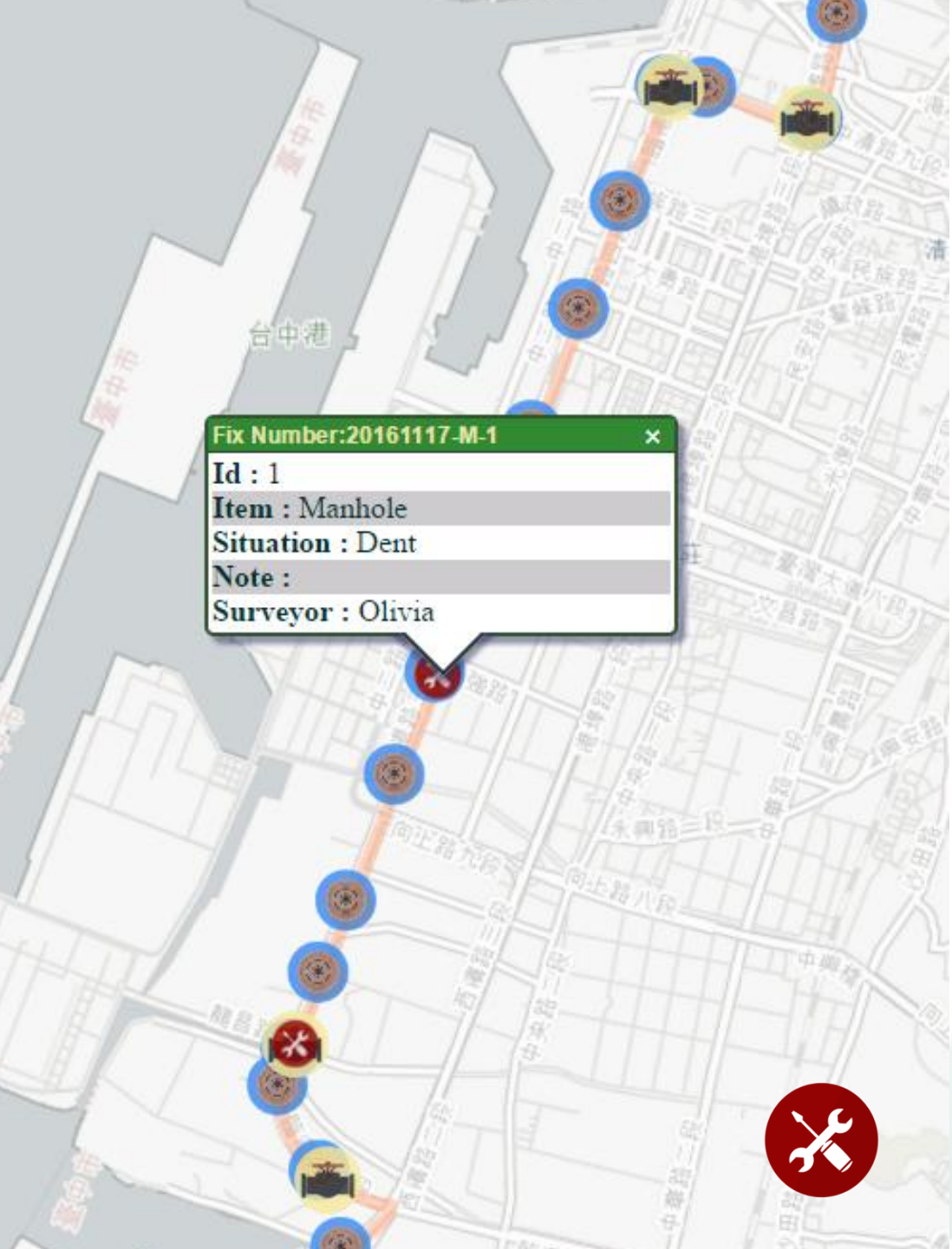
Relational Table

# Efficiently Inspect & Update

# Relational Table

- Inspect facilities & record damaged object status
- Set needed info in **Relational Table** & save time in key-in the same info again in the field.



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# Sync Collected Data

- Access to SuperGIS Server Service via SuperPad
- Update the check sheet to the website in real-time

# DEMONSTRATION

# Conclusion

Activate NTRIP solution to do positioning

Establish an online utility map with **SuperGIS Server**

Synchronize collected data to the utility map in real-time

Use relational table to manage data more easily

# SuperPad Supports

## Raster layer

SGR, BMP, GIF, PNG, MrSID, ECW, LANTIFF(includes GeoTIFF), JPG, JPG2000

## Feature layer

GEO, SHP, DXF

## OGC Standard

WMS, WMTS, WFS


OGC®
Making location count.

# System Requirements

## Windows Mobile

5.x/6.x

## Windows

7/8/8.1/10 (32/64bit)

## Supported Languages

English, Arabic, Spanish, Portuguese, German, French, Italian, Russian, Turkish, Polish, Japanese, Korean, Chinese

| Features | SuperSurv M3 * | SuperSurv 3.3 | SuperPad 3.3 |
|---|---|---|---|
| Operating System | iOS | iOS | |
| General Vector Format Support | ◎ | ◎ | ◎ |
| Raster/Tile Support | ◎ | ◎ | ◎ |
| Online Base Map | ◎ | ◎ | ◎ |
| Global or Custom CRS Support | ◎ | ◎ | ◎ |
| On-The-Fly Projection | | | ◎ |
| Offline data display and edit | ◎ | ◎ | ◎ |
| Data collection via GPS/GNSS | ▲ | ◎ | ◎ |
| Online Editing | | ◎ | ◎ |
| Advanced data editing | ◎ | ◎ | ◎ |
| Identify and attribute Query | ◎ | ◎ | ◎ |
| On-screen measurement | ◎ | ◎ | ◎ |
| Navigation and Waypoint | ◎ | ◎ | ◎ |
| OGC Standard Service(WMS/ WMTS/WFS) | ◎ | ◎ | ◎ |
| Customization and Extensions | ◎ | ◎ | ◎ |
| External GPS/GNSS receiver Support | | ◎ | ◎ |
| NTRIP connection Support | | ◎ | ◎ |
| Post Processing | | | ◎ |

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# Collect Data with SuperGIS

Find SuperGIS mobile apps on different platforms for your device.

# Simply Learn More!

- SuperGIS Webinar
- SuperGIS Free Online Course
- Supergeo Forum
- Supergeo Developer Network
- Supergeo TV


| Desktop GIS | Mobile GIS | Server GIS |
|---|---|---|
| Get Started with SuperGIS Desktop: Download, Install, and License | What is GIS? | Manage with SuperGIS Server |
| Data Import and Export | Collect Field Data with SuperPad | Edit Data Online |
| What is GIS? | Edit Data Online | Produce Map Sheet |
| Edit Data Online | Collect Data with SuperSurv iOS | Customize SuperGIS Server - JavaScript |
| Produce Map Sheet | | Work with SuperGIS Server Android SDK |
| Customize SuperGIS Server - JavaScript | | Work with SuperGIS Silverlight API |
| Develop Extensions in Desktop | | Work with SuperGIS Server iOS SDK |
| Manage Image Data | | Publish and Consume the Process Service |
| Advanced Data Visualization and Analysis | | JavaScript API: NEW Create a map from SuperGIS Server |
| | | JavaScript API: NEW Overlay your map with online maps |
| | | JavaScript API: NEW Re-design your map |
| | | JavaScript API: NEW |

# Quick Poll III

SupergeoTV

# Get trial !

SuperGIS Software

# Q&A Time



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Free Trial

Driving Our World with GIS