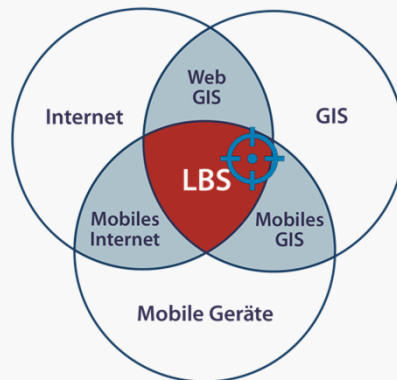


LBS-Mobile

A New Way of Handling Data

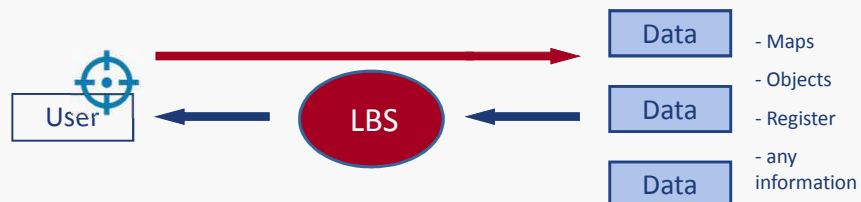


Peter Dutschler & Martina Stocker

ALPGIS AG, Thun, Switzerland

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LBS Mobile – Location Based Services



capture, edit, and manage Object data space-and time-independent

2

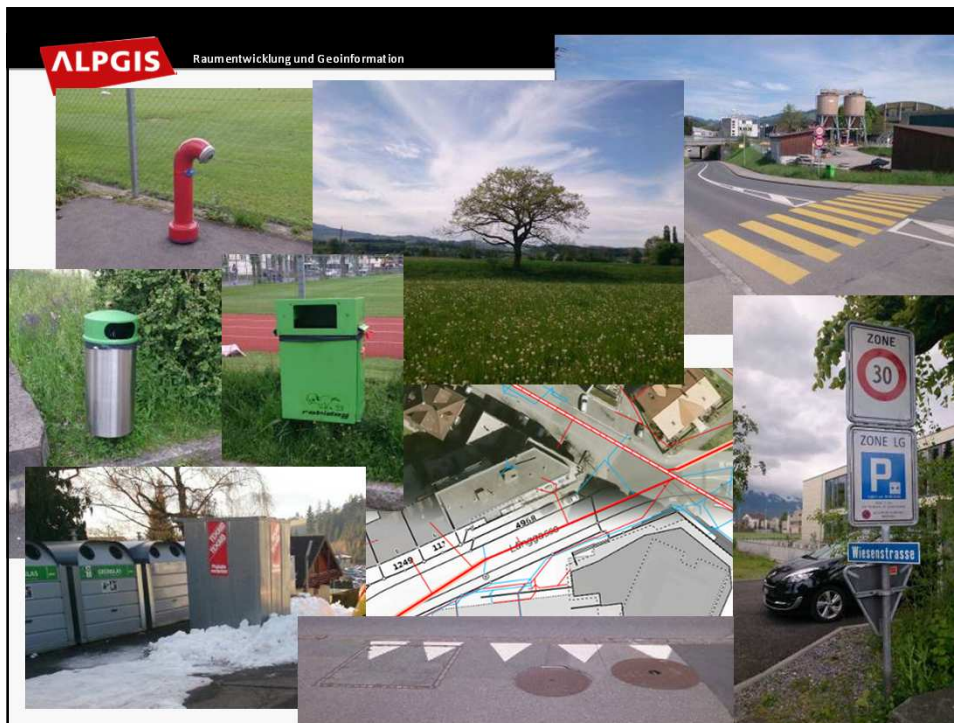
LBS Mobile – technical requirements

- Runs in normal Internet browser
- On a commercial tablet, PC or Smartphone
- No software to install



LBS – what can it be used for?

- Reacquisition of objects on site
- Add existing objects other attributes
- state controls
- Documentation of operations / maintenance
- For everything that has somehow coordinate ...
→ Surfaces, lines, point objects



LBS – Examples

- Sewer manhole inspection
- Conservation Inventory
- Robidogs
- Parking Management
- Flower boxes and hedges
- Benches
- etc.

LBS Specialities / Advantages

- Central data storage, mobile access
- Various types of maps
- Guided workflow for different users
- Different processing masks depending on the condition
- Direct upload of photos and documents

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Multidimensional Data Flow

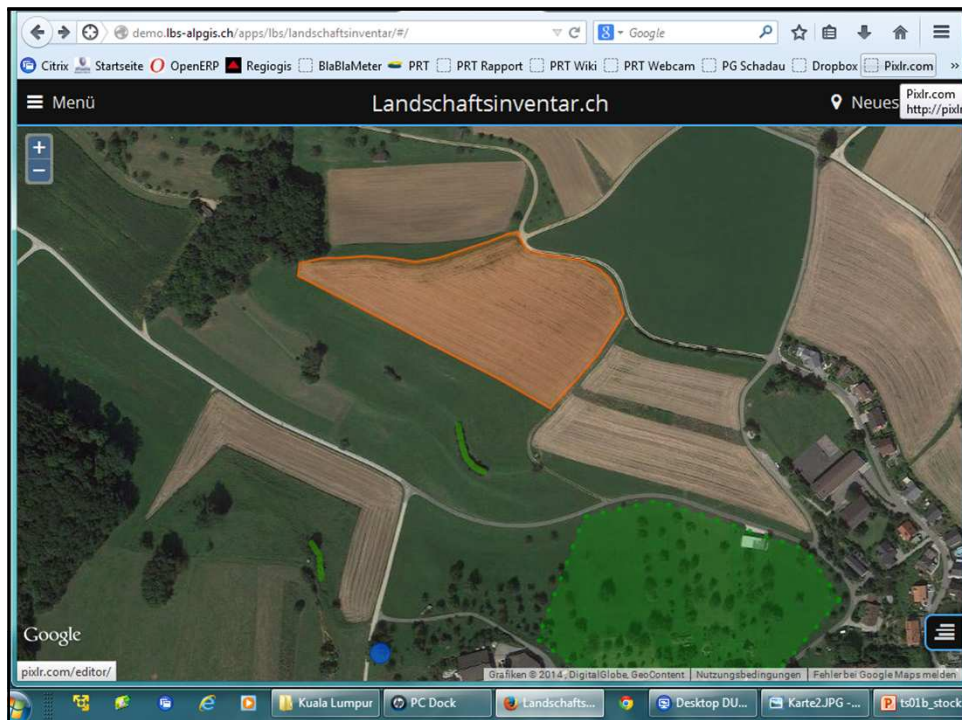
- More than an information provider:
 - facilitates **checking** and **editing** data
 - adding new **attributes** or **pictures** to objects
 - **registering** new data
- Basic functions with user's position:
 - **Routing** to the nearest point of interest (POI)
 - Creating new objects based on coordinates

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Inventory of Nature Conservation Objects

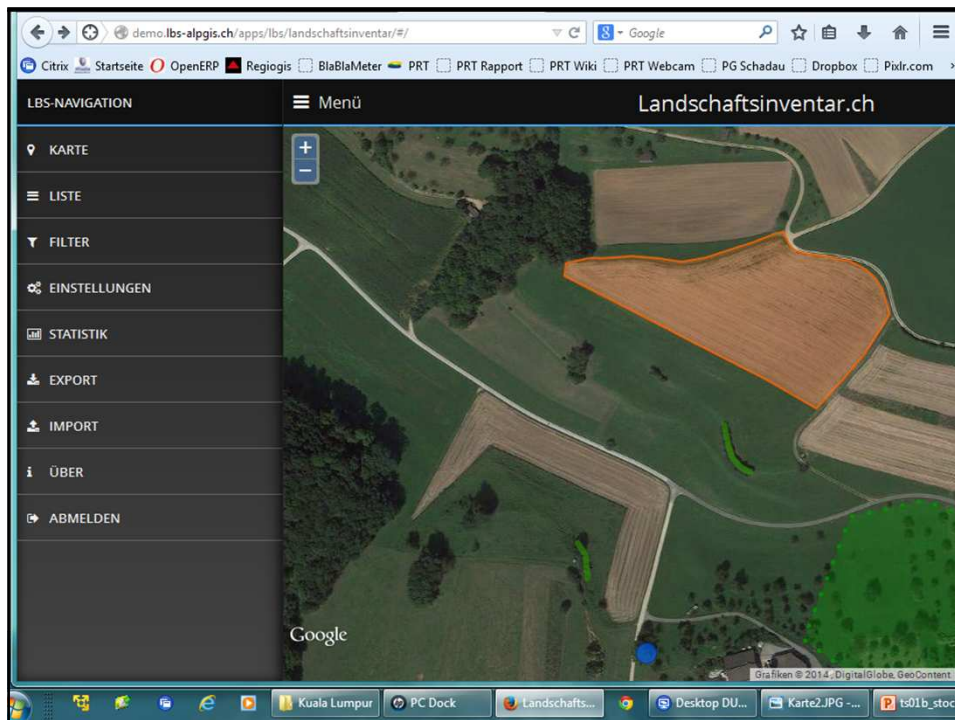
- Objects of varying type and geometry with different attributes
- Trees under protection
 - **point** objects
- Safety fences for amphibians
 - **line** objects
- unobstructed fores
 - **polygons**

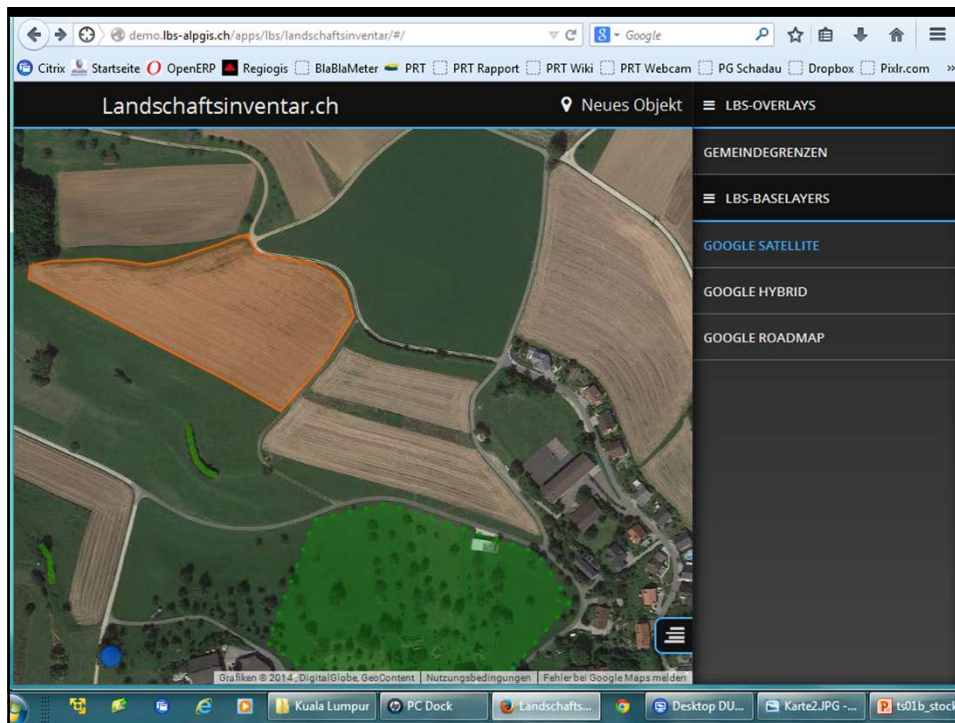
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GUI optimized for mobile devices

- All objects modeled in WebGIS
 - attributes and relations
- optimized for use on mobile devices
- Map with current position
 - local orientation
 - locating of objects



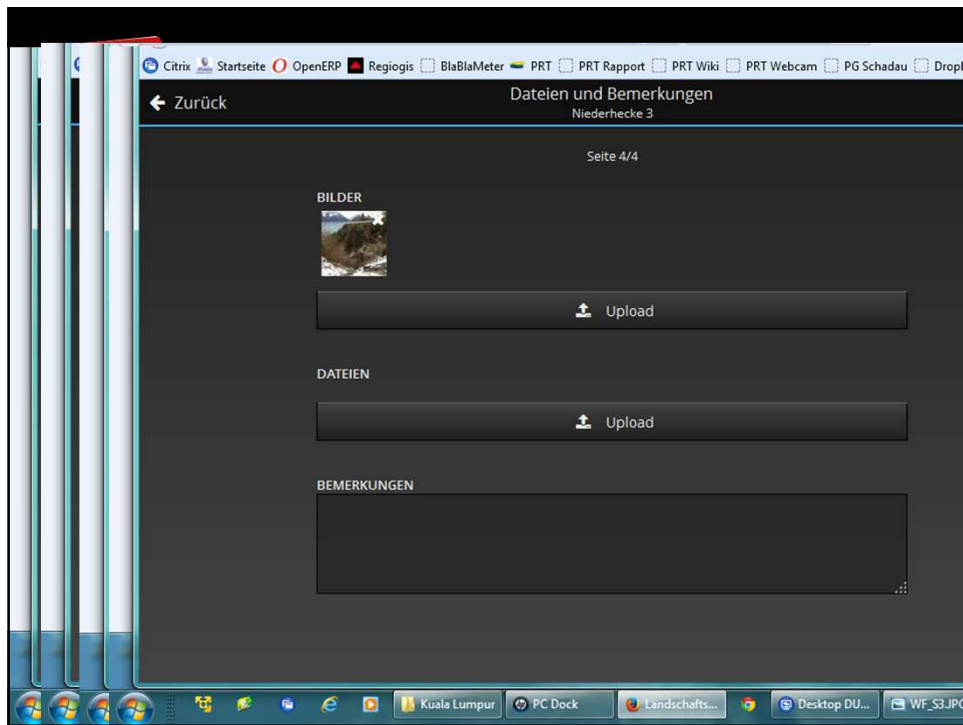


ALPGIS Raumentwicklung und Geoinformation

Workflow needs no paper

- New Object
 - at user's current position
 - Attributes recorded into the database
 - No paper, no need to draw a sketch of the situation
 - pictures can be uploaded and assigned to the right object
- Intuitive, easy to learn, big buttons, "fire and forget"
- Realtime visible in webservice

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Maintenace Planning&Documentation

- Safety fences for amphibians need regular maintenance
- LBS-Mobile for planning and documenting
 - existing objects can easily be located by the help of the smartphone or tablet
 - When maintenance is done
 - Updating status on site: No further documentation later on
 - Specific remarks can be added to an object including a date for follow-up.

Monitoring of Areas

- Areas of unobstructed forest are checked yearly by recording the occurrence of indicator plants
 - Number and type of the plants are directly recorded into the database
 - necessary entertaining work are set
- The completion of the maintenance work later on will also be documented in the application.

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LBS – the question of the accuracy...

- Integrated GPS
- External antenna / receiver
- Piksi



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Where are we going?

- Presentation of spatial data is no more a problem
- Geoservices are becoming increasingly important
- Making available geoservices
- Benefit from geo-services
- Added value through linking of information
- Use of mobile devices

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CONTACT

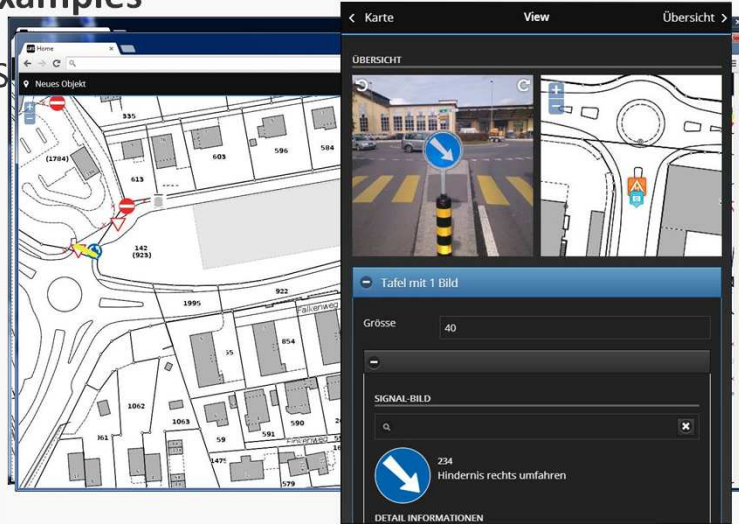
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LBS – Examples

- Traffic S



LBS – Examples

- Manhole /



ALPGIS Raumentwicklung und Geoinformation

Anbau Tiefgarage und Wintergarten
Stockhornstrasse 15 3600 Thun - P380

LBS – Bei

- crack pro

Riss 4

Aufnahmeobjekt MFH K, Stockhornstrasse 17 3600 Thun - P380
Stockwerk 1., Untergeschoss
Risstraeger Fassade (ausssen)

Inspektionen 16.02.2014

Länge 400


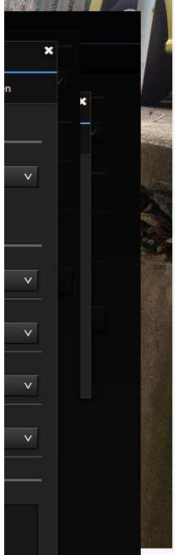
Rissdefinition Schwindrisse Grössere Anzahl von feinen Rissen im Verputz oder Anstrich

Rissdefinition Schwindrisse Grössere Anzahl von feinen Rissen im Verputz oder Anstrich

Rissrichtung Kombination Horizontal- und Vertikalriss

Orientierung Wand links

Bilder





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ALPGIS Raumentwicklung und Geoinformation

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