Objectives and Challenges of Project SimpleFleet

Rüdiger Ebendt
German Aerospace Center
Copenhagen, 06.05.2012
Consortium of SimpleFleet

- Coordinator:
  German Aerospace Center (DLR), Germany
- RC ATHENA, Greece,
- WIGeoGIS, Austria
- TALENT S.A., Greece
German Aerospace Center (DLR), Germany

- Institute of Transportation Systems DLR-TS
- Coordinator of project SimpleFleet
  - Traffic data recording
  - Traffic data management
  - Traffic simulation and prediction
- www.dlr.de/ts
RC ATHENA, Greece

- Public research center
- Institute for the Management of Information Systems (IMIS)
  - www.imis.athena-innovation.gr
  - data management and large-scale information systems
  - GeoInformatics
WIGeoGIS, Austria

Since 1993, WIGeoGIS has connected corporate data with population and economic data based on digital maps.

- Spatial business intelligence and geomarketing.
- IP-based map and location services for Internet and mobile Internet.
- Used particularly in information portals, in the Intranet and Internet and as location based services.
TALENT S.A., Greece

- Talent S.A., founded in April 2003, is a high-tech company that develops Information systems that involve processing of geographic and geo-coded data, like
  - Fleet management systems
  - Web-mapping and publishing systems
  - Asset and property management systems
  - Crisis management systems
From XY to Traffic

Map Matcher

FCD Collection Framework

Data Store
Collected FCD
Current travel times
Speed profiles

Travel Time Maps
TT Assessment & Prediction
Routing Services

Tracking Vehicle Fleets

SimpleFleet
Services

...not just data
SimpleFleet

- Live data streams (FCD)
- Algorithmic framework
  - Map streams to network
  - Route vehicles
  - Fleet Statistics
- Data + Services
  - API, SDK
  - Application Framework
- Business intelligence
Visualization, Geomarketing, Demonstrator-App
Challenges

- Existing fleet management solutions are
  - too complex
  - too expensive

- Online routing requires live traffic data
Solution

• We need
  – good data, good algorithms
  – a simple setup

• Achieved by
  – aggregating large amounts of traffic data
  – providing fundamental algorithms for data management and routing
  – web-based API and framework for mobile and web applications
Thank you!

www.simplefleet.eu