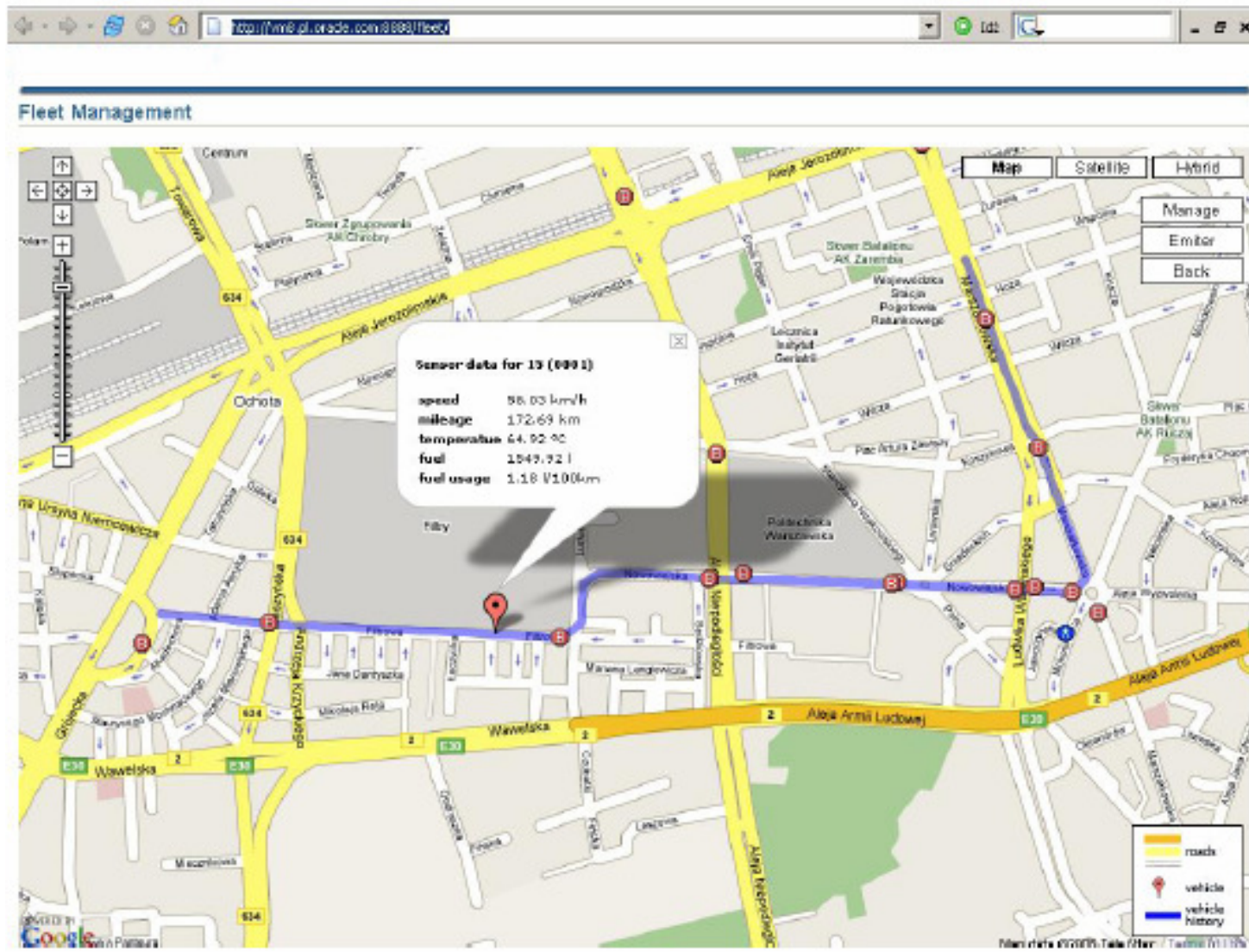


TI-LOGS The Logistic Operations Support System

TI-LOGS Transport Management

- **Transport Management**
- **Technology** J2EE Application, Web Services, ADF
- **Products involved** Oracle Database, Linux Application Server
- **Applicability** Public transportation, fleet management
- **Description** Transport Management is an on-line web solution to track vehicles, display their positions on the map (in real time), and show relevant parameters like actual speed, mileage, fuel usage, position history of tracked vehicles etc.
- The solution uses Google Maps as a display layer
- Vehicles would require special devices to be mounted, with GPS sensor and the ability to communicate to server side via GPRS/UMTS/EDGE etc.



Transport vehicles tracking

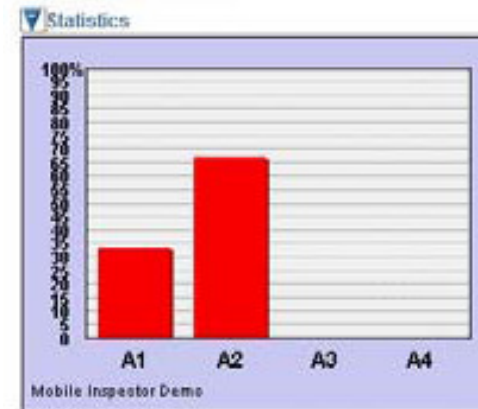
Controller Review application

- Mobile offline application that allows inspectors to conduct surveys of (virtually) any type, using PDA or Smartphone.
- The results of the surveys are stored in local database, and are synchronized with the central database when the user goes online.
- Utilizing Sensor Edge Server for the purpose of automatic collection of data from sensors is a subject for extension.

Tasks

Available Tasks

Select	Task Title	Survey Definition	Assigned To	Task Status
<input checked="" type="radio"/>	Random Person	Customer Service Satisfaction	agent1	Assigned
<input type="radio"/>	Talk to Customer	Customer Service Satisfaction	agent3	Assigned
<input type="radio"/>	Amy Kovalsky	SAPARD Survey	agent3	Assigned
<input type="radio"/>	Meeting with John Smith	Customer Service Satisfaction	agent2	Assigned
<input type="radio"/>	Meet with Jane Doe	Movies Rental Survey	agent1	Finished
<input type="radio"/>	Talk to Anyone	Customer Service Satisfaction	agent1	Finished
<input type="radio"/>	Talk to George Brown	Movies Rental Survey	agent1	Finished
<input type="radio"/>	Meet with Tom Kovalsky	Movies Rental Survey	agent1	Finished
<input type="radio"/>	Meeting with Someone	Customer Service Satisfaction	agent1	Finished
<input type="radio"/>	Client	SAPARD Survey	agent2	Finished



Remote Access to Database

- **On-line application that provides mobile access to back-office system for agents while they are away from the office. Agents can search/modify database, and create appointments.**
- **Access to application is online through PDA's or Smartphone's web browser. Hence, to access the application, no installation process is required.**



Palete Creation application

- The application automates the process of completing a pallet (associate units to a pallet), based on RFID sensing.
- The completed pallet can be verified whether it is complete or not (some units missing). The application sends SMS or Voice alerts whenever exceptional situation occurs.
- User can also browse previously created pallets and get information about their contents as well as information about passing “verification gates” (when and where pallet was complete or incomplete).



Pallet Creation Details

New pallet:

Number of cases: 3

1. e004010000546814
2. e004010000546a9d
3. e0040100005473f5

The Navigation Application

- **Always connected location-based application. The solution provides functionality to place objects on the map, enter their names, description and taking photos.**
- **Map is fully browsable and scalable. It can be used in its initial purpose - entering data about damaged public objects or in a variety of other purposes like monitoring road condition or trees. Utilizing GPS antenna is a subject for extension.**
- **Application Requires installation on mobile device (running MS Windows CE and .NET Compact Framework 2.0).**



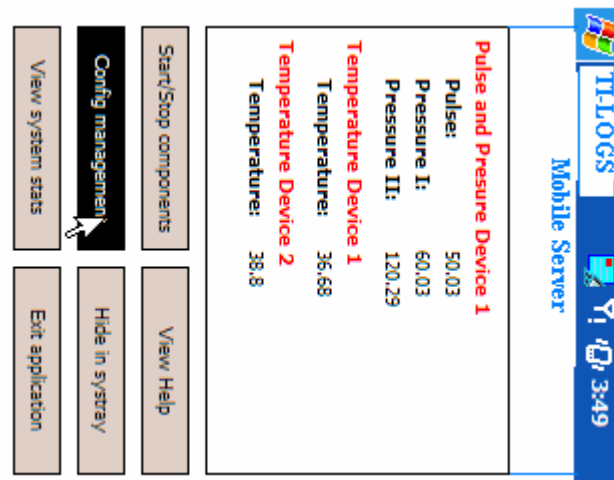
Mobile Agent Force Automatization

- The application is dedicated for agents distributing goods among disposal points distributed in multiple sites. Each sales representative collects orders from his clients and enters it into application together with the location data and possibly other information on given client. All data from representatives working in the field are collected and submitted to the central database.
- Programs running on client terminals don't require a constant connection to the network. Data may be synchronized with the central database whenever the client device is connected. Additionally, application includes functionality related to sales force management and exemplary reports.
- Application Requires installation on mobile device (running MS Windows CE and .NET Compact Framework 1.0 or higher).



Mobile Server

- Embedded, Telematics and Machine-to-Machine solutions
- Mobile Server is a .NET application that handles data and events received concurrently from multiple sensors & actuators.
- Running on a PDA or an in-car device, data is received, then filtered and rules applied. Once filtered the data can be stored either locally or dispatched directly to the on-line server, for example by utilizing SOA architecture.
- Rules for managing data and processing events, even regarding communication of this information can be defined remotely and provisioned over the air.



Number Plate Recognition

- **Automatic number plate recognition PR is a method that uses optical character recognition on images to read the car plates. It is often used by police forces and as a method of electronic toll collection on pay-per-use roads, and monitoring traffic activity.**
- **After the optical reader recognizes the plate number, this information (text string of few bytes) can be send then to Mobile Server, or Database for further analyzing and processing.**



Tracking Application

- The application uses EPC network and RFID to enable item's data tracking/updating.
- The screen displays information about product's contents, packaging, shipping, etc.

Track & Trace

The image shows two overlapping screenshots of a web-based tracking application. The top-left screenshot displays a 'Packaging' window for a cheese product. The bottom-right screenshot displays a 'Cheese: Organic Wensleydale' window with production details and a list of distribution points.

Welcome to Sensor World
Track & Trace

Packaging
Package manufacturer: Shrinkwrap Films
Plastic type: PAP22 - Recyclable Compo
Production location: Paris, Fran
Production time: 17/12/2003 - 16:56

Label
Manufacturer: Neuchatel Label
Label type: D0515 - Recycled Pap
Adhesive type: 50445 - TNT Base Ad

Welcome to Sensor World
Track & Trace demo

Cheese: Organic Wensleydale
Production location: Aysgarth Dairy, Hawes Road, Aysgarth, Yorkshire YO13 4GF, UK
Production time: 21/01/2004 - 09:15:22

- 334256 (Canada) - Penzance - 24/11/03
- 543728 (Ave) - Penzance - 23/11/03
- 567343 (Daly) - Penzance - 20/11/03
- 124398 (Central) - Penzance - 13/11/03
- 607509 (Micks) - Erythronium - 06/09/03

Smart Shelf Application

- Retailing, warehousing, logistics
- Description Shows how RFID can enable real-time item inventory in shops or warehouses.
- Screen shows how many items are stored on a particular RFID-enabled shelf.

A screenshot of a software application window titled "Smart Shelf demo". The window displays a table with four columns: "Name", "Attributes", "Quantity", and "Shelf name". The table contains three rows of data. The background of the application is a light gray color. The Windows taskbar is visible at the bottom of the screen.

Name	Attributes	Quantity	Shelf name
DEMO BOX	BLACK / LARGE	1	MOBY_SS
DEMO BOX	WHITE / MEDIUM	1	MOBY_SS
DEMO BOX	WHITE / SMALL	2	MOBY_SS

RFID Doorman Application

- Displays information about people passing RFID gates.

RFID - Improving visibility through our clients' value chains

Capability teams:	Position:	Total attending:	% attending:	We have just seen:
Team 1	1	2	50.0%	Alice
Team 2	2	2	0.0%	Mark
				Ashley
				John
				Alice
				John
				Alice
				John
				Alice
				John
				Alice
				John
				Alice

TI-LOGS Doorman

Bar Code Web Application

- **The application generates a MMS with picture of barcode based on data entered via Web (JSF) user interface.**
- **It is sent to distant Control location or data base.**

Mobile Procurement Application

- Always connected mobile web application that provides access to core functionality of the E-Business Suite application - iProcurement.
- It allows to accept/reject requisitions for which the user is selected as an approver. Generally the application is meant to minimize the delays, which incur between creating the requisition and getting the approval for it, and make the iProcurement solution available for people being in the field.

