

OWN THE DATA

Vehicle Diagnostics and Connected Car Services

FIA

Mobility Conference Week 2013

The Hague



DELPHI

Innovation for the Real World

OBd Diagnostics

Aftermarket and OEM tomorrow

OBd II Aftermarket Module



- Connected to Cloud via Mobile Network
- Connected to Cloud via User's Smartphone
- Uses Diagnostics generic OBD & EOBD
- Car Specific functions based on OEM Documentation and Reverse engineering

Data available for
complete Aftermarket
ECOsystem

Telematics from Manufacturer

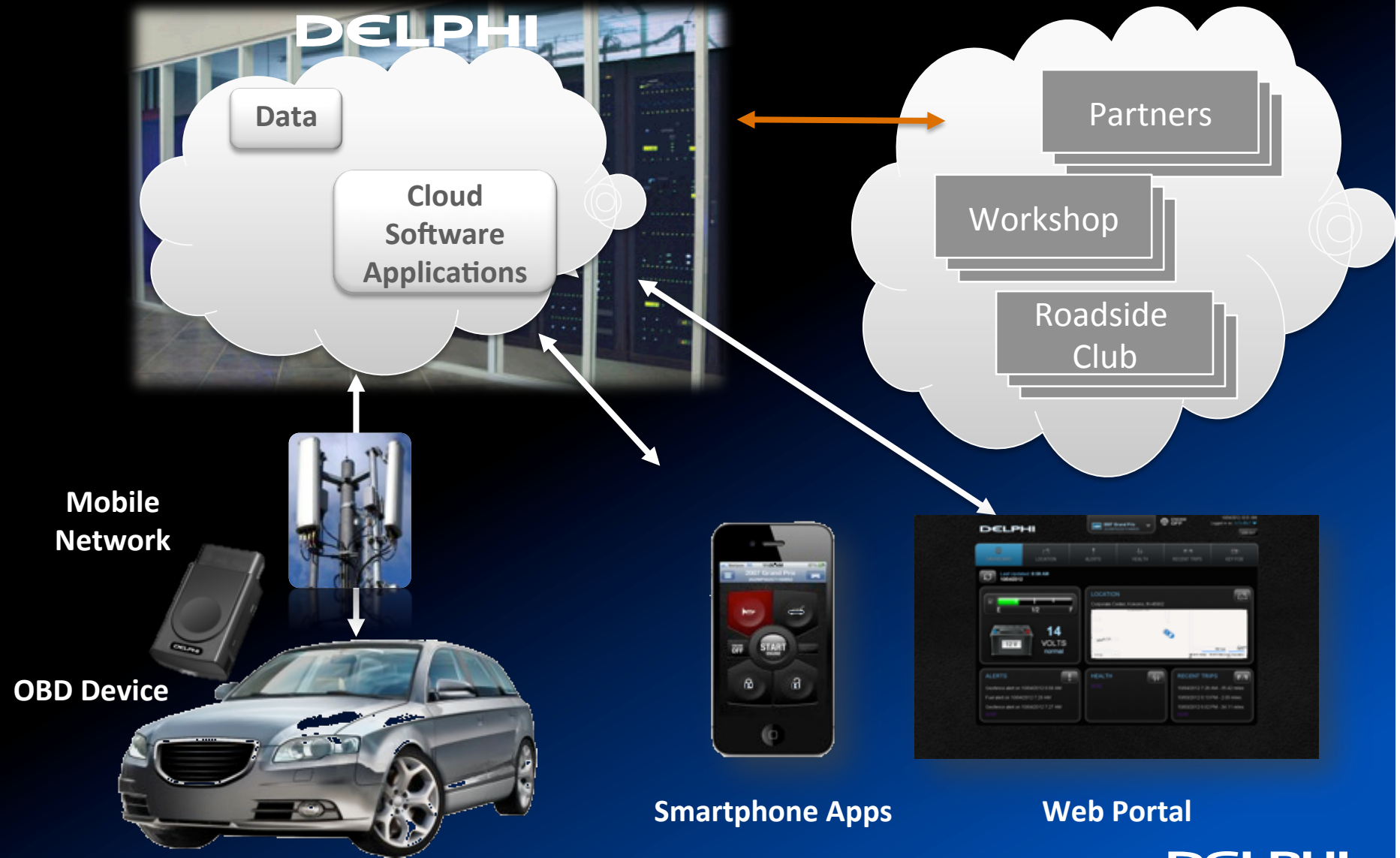
For example:
BMW, Mercedes, VW, Audi, Toyota
Jaguar Landrover, Volvo ...

- Most will launch remote Diagnostics in the Future
- Can bind the customer to the OEM Workshop
- Interest low to have Aftermarket solution available

Closed system available
to OEM and OEM
Workshops

Remote Diagnostics via OBD

Ecosystem Elements



Diagnostics: who owns the port ?

Free Access to more than exhaust system data in the future ?

- **The OEM owns the OBD port and the features available on it**
- **A Growing market for OBD port based solution for the Aftermarket is rising**
- **What level of information has the Aftermarket today and in the future via Diagnostics Tools ?**
- **Main Can Data is not encrypted today.
Encryption could come up with future Bus systems
(Flexray, Automotive Ethernet)**

The Car Owner and the Car user

Does the user want another device in the car ?

- **Under 40 and 50 generation**
- **Is Big Brother watching you ?**
- **Customer care and trust to the Workshop and Roadside club**

Backup

Vehicle Diagnostics by Delphi

Award winning system



- **Winner of Popular Mechanics Editor's Choice Award for Automotive at CES 2013**
- **Winner of Gold Edison Awards 2013**



Vehicle Diagnostics by Delphi

Connected Car Services

- **Consumer-focused product and services**
 - **Easy to install**
 - **Unique simple interface for user**
 - **Works in webbrowser on every device or APP on smartphone**
 - **App for IOS and Android**
 - **“Mom and Pop” fleet. Small fleets for <10 Vehicles (Small Business, Family)**
 - **Regular update and feature growth**
 - **The car talks directly to the cloud**
 - **Interface to 3rd Party's available**

Thank You

Detlef Wilke
Technical Manager
Delphi Deutschland GmbH

DELPHI

Innovation for the Real World

Vehicle Diagnostics and Connected Car Services Dashboard



- Select Active Vehicle
- Engine Running Status
- Fuel Level and Battery Voltage
- Summary of all Vehicle Status
 - Location
 - Vehicle Alerts
 - Vehicle Health
 - Recent Trips

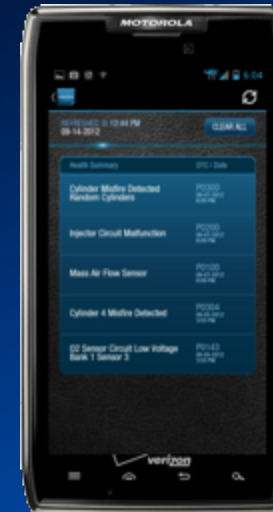


Vehicle Diagnostics and Connected Car Services

Health



- List of Vehicle Diagnostic Issues Found
- Automatically Scanned at Device Plug-in
 - Engine Off, Ignition On
- User-Initiated All Other Times
 - Use Refresh Button on Health Page



Requesting Car Diagnostics

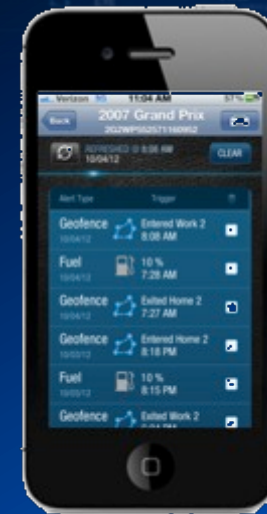
Caution!
Stop your vehicle, turn off your engine and place your ignition in the ON position WITHOUT starting your engine before proceeding with this step.
Once scanning is initiated, do not start your engine for at least two minutes.

Continue Cancel

Vehicle Diagnostics and Connected Car Services Alerts



- Check Engine Light
- Low Fuel (<10%)
- High-RPM (configurable)
- Coolant Temp (>105 °C)
- Low Battery (<11.5 V)
- Geo-Fences crossed
- Motion alert (g-force)
- High-speed (configurable km/h)
- E-mails and SMS for Geo-Fences and High-speed alerts

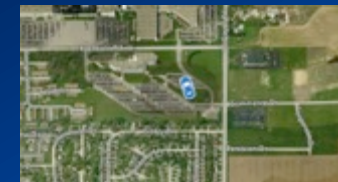
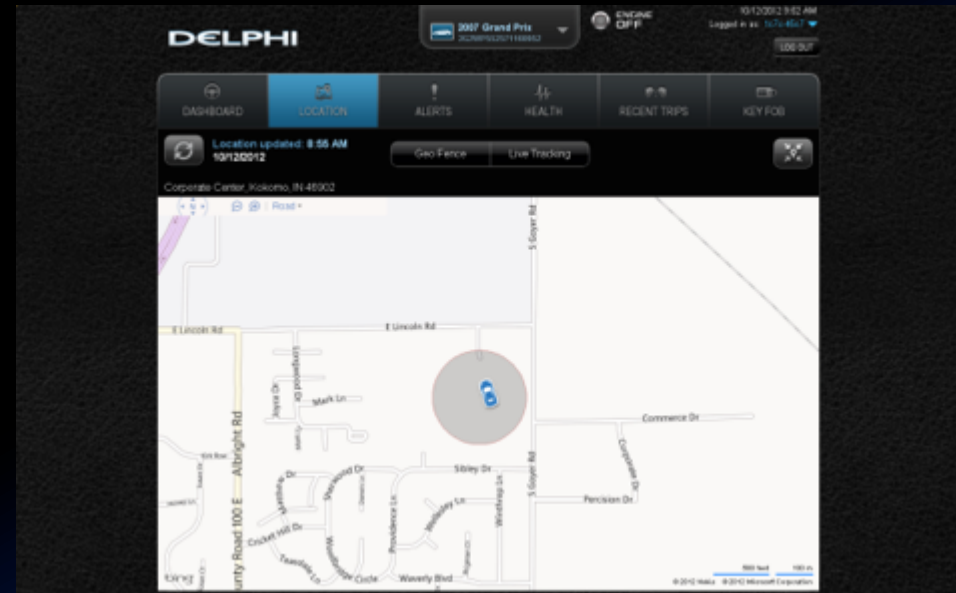


Vehicle Diagnostics and Connected Car Services

Location



- Show Last Parked Location of Vehicle
- Vehicle Name, Address, Latitude/Longitude
- Refresh to Get Current Location
- Views: Map, Birds-Eye (portal), Satellite (app)
- Directions to Vehicle on Smartphone

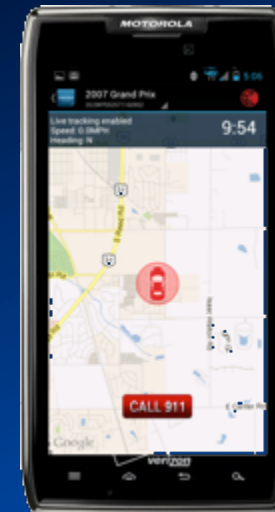
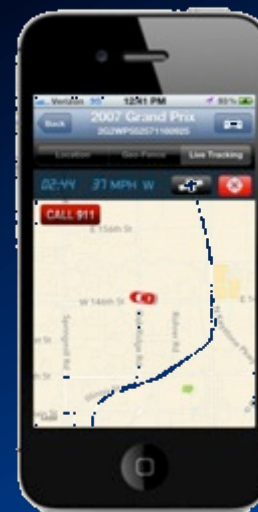
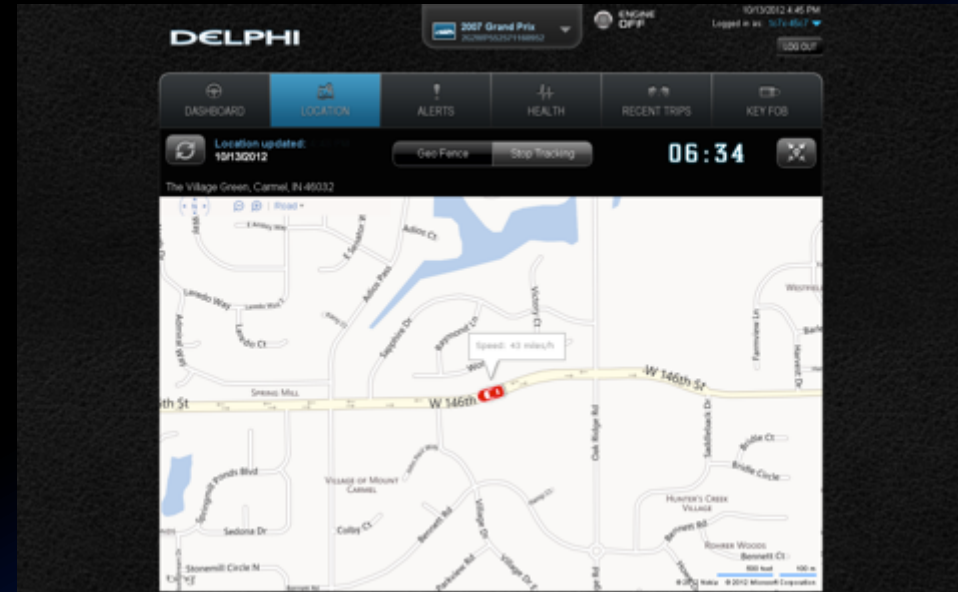


Vehicle Diagnostics and Connected Car Services

Live Tracking



- Enables Real-Time Vehicle Tracking
- Vehicle Speed
- Vehicle Heading

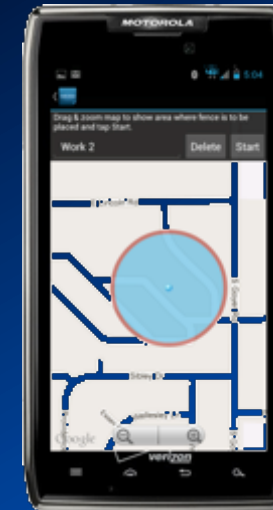
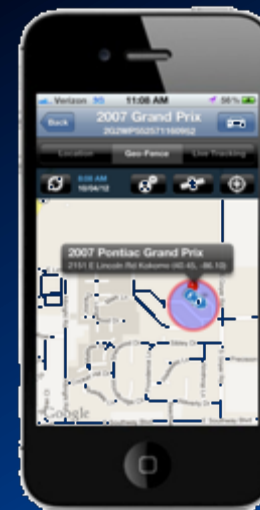
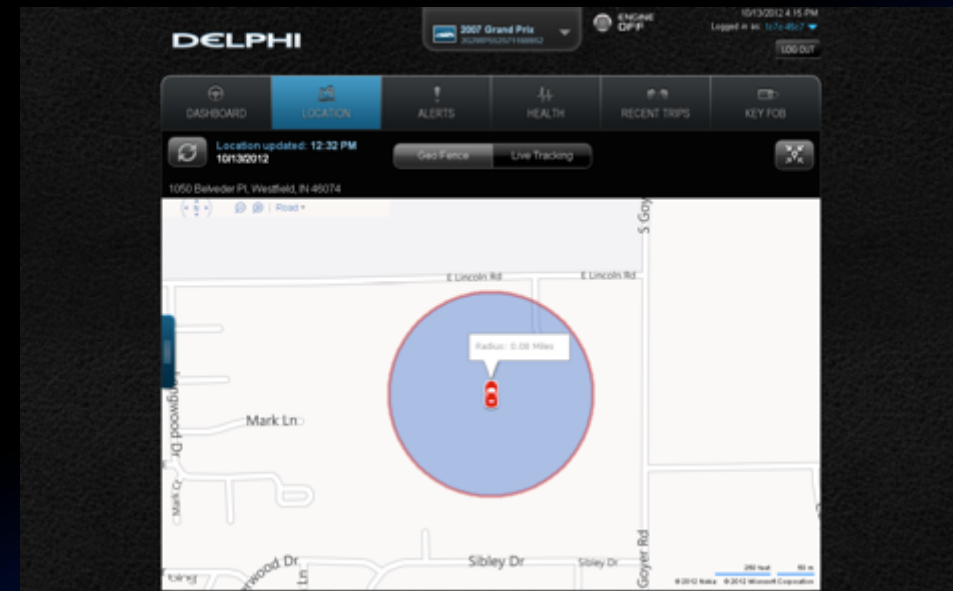


Vehicle Diagnostics and Connected Car Services

Geo Fences



- Set up Fences around Locations
 - Name
 - Center
 - Size
 - Enable/Disable
- Receive Alerts for Entry and Exit from Geo-Fences via SMS and Email

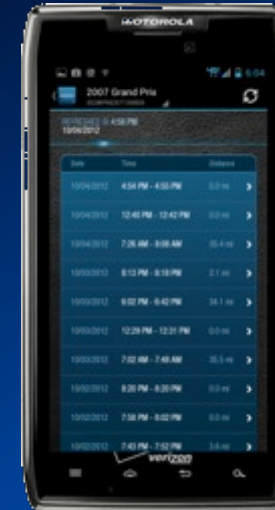
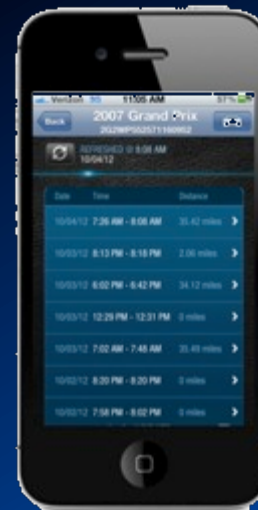
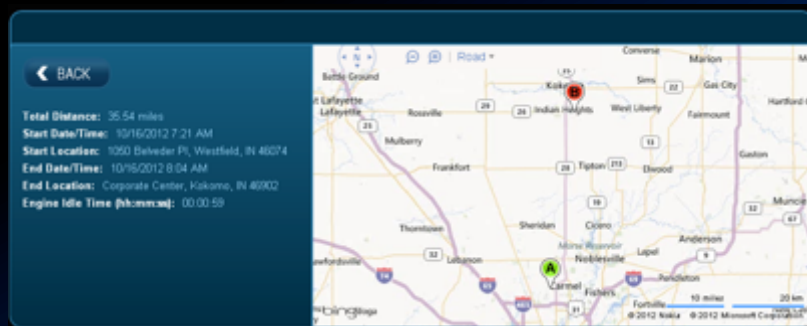
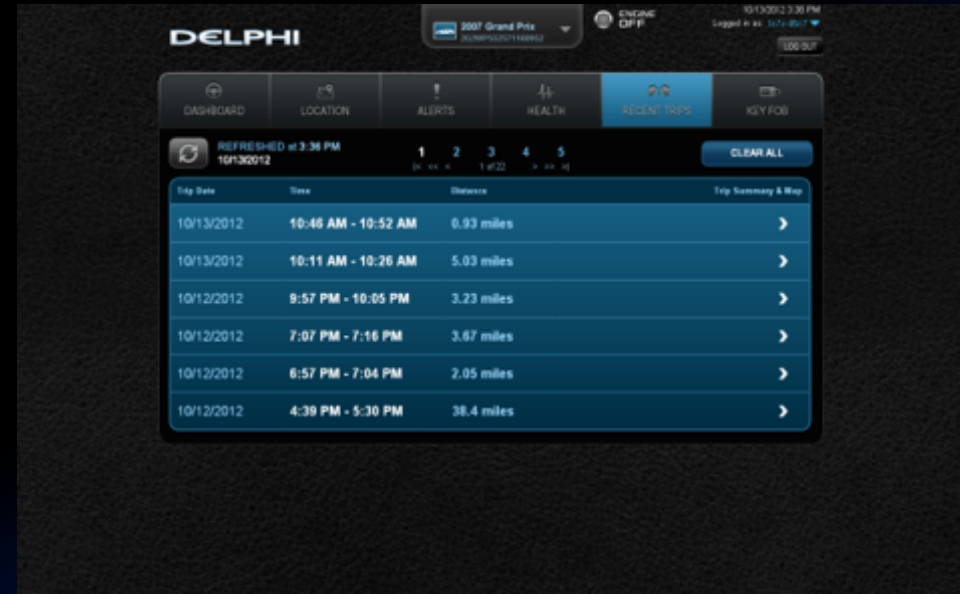


Vehicle Diagnostics and Connected Car Services

Recent Trips



- Summary of All Trips from Engine Start to Stop
 - Date, Times, Distance
- Detailed Trip Info
 - Distance
 - Start Date/Time
 - Start Location
 - End Date/Time
 - End Location
 - Engine Idle Time
 - Map View of Trip



Vehicle Diagnostics and Connected Car Services

Future Features: Key Fob



- Emulation of OEM Key Fob *
 - Lock
 - Unlock
 - Remote Start/Stop (if available)
 - Trunk (if available)
 - Panic/Horn
- Operates Over Cellular Network or Bluetooth (Direct Connect)
- Requires One-Time Setup to Configure Key Fob to User Vehicle



DELPHI