Using OSGi To Successfully Deliver Consumer Services From Several Different Networking Environments:
Reviewing The Car-Home Continuity

Continuity Home-Automobile for Residential customers

The CH@R project for car – home continuity
OSGi World Congress, 25th September 2002
AGENDA

- Introducing and positioning the Car-Home project in the telematics space
- Outlining the objectives of Car-Home Continuity project
- Which services can already be offered seamlessly to both car and home & outlining the applications being developed to run on this framework
- Determining the optimum service delivery architecture for seamless integration of automotive and in-home services - implementing OSGi architecture for a car and home networking platform
- Forecasting the growth for the market for delivery of services to and between the car and home
- Successfully developing partnerships with applications developers to maximise the opportunities afforded by the OSGi
CH@R positionned in the telematics industry
Positioning in telematics

New flavour

Traditional telematics services
- Off-board Navigation
- POIs
- Insurance
- E&B-Call
- Fleet & logistics
- CRM & After-sales
- E-mail
- News
- Traffic information
- Governments

Car OEM, Telco, MVNO

HOME

CAR

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Objectives of the Car-Home continuity Project
Project Goal

Starting Point:

⑦ France Telecom proposes home services
⑦ The car can be seen as a particular room of the house that sometimes leaves it

Goals: to propose services offering a continuity between home and car with three axes:

⑦ To access from the vehicle to data or services relative to the home
⑦ To access from the home to data or services relative to the vehicle
⑦ Continuity of the services when moving from the vehicle to the house (or the other way)
Services and applications
Types of services

- Better time management in order to win time
  - Life management tools
  - Anticipate and correct actions

- To feel reassured
  - If there is a problem, I will be informed

- Comfort and pleasure
  - Adaptation to customer profile
  - Entertainment for passengers and driver

- Keep in Touch
  - Communication!
CH@R Services

→ From the vehicle to the home:
   ⑦ Access to personal and family information
   ⑦ Home Telemetry
   ⑦ Data and information registration
   ⑦ Travel organisation: local points of interest
   ⑦ Telephony in relationship to family data

→ From the home to the vehicle:
   ⑦ Car localisation

→ Continuity of services:
   ⑦ Get back its personal environment: music, video, games
Some usages

- **Access to personal data**: you are blocked in a traffic jam while commuting and you want to access to your personal phone book or the updated agenda of your relatives.

- **Telemetry**: on the way coming back home you can prepare your house: remote control of the gate, the lights, the heaters…

- **Car localisation**: you share your car with your wife and you don’t know where she has parked it. Or: you car have just been stolen and you want to localize it.

- **Information registration**: you register in your address book the localisation of a place of interest on the road. You register via a vocal memo an idea you’ve just had in your car and you don’t want to forget.

- **Personal environment**: just before a travel, you download your videos, music or games and you can resume your video or your game in the car at the moment you have stopped them in your house.
The optimum service delivery architecture
Requirements

- Easy operations and maintenance
- On-board intelligence
- Easy service development and deployment
- Terminal & OS independent
- Standard technologies
- Flexibility and adaptation to changing market needs
- Link with CRM and billing activities

Services

based architecture
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**OSGi based architecture**

**Personal data:**
- User profile
- User data

**Contextual data:**
Current parameters of use of services / appliances

**Service Delivery SW**

**Service Aggregator**

**In-home functionality**

- Home network

**Home gateway**

**In-car functionality**

- Vehicle bus

**Wired Networks** (e.g. ADSL)

**Wireless Networks** (e.g. GPRS, WLAN)

- telematics terminal

**france telecom**

**ACUNIA**
Service Life Cycle support

SERVICE PROVIDER
- Develop
- Test
- Deploy Service
- Applications Hosting

SERVICE AGGREGATOR
- Configure
- Localize
- Register
- Test
- Publish
- Preferences
- Subscriptions
- Console
- Deploy (Remote Mgt)
- Alerting
- Logging

TERMINAL
- Service management
- Remote management
- Service usage

WORKFLOW
- Applications Hosting
- Product Definition
- Multi-channel Portal
- Customer Relation Mgt
- Rating
- Billing
- Procurement
- Vehicle Relation Mgt

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Real project architecture

- Home Telemetry and remote actions
- Access to personal and family information
- Video (MPG4) & Music (MP3) Continuity
The market for delivery of services between car and home
Marketing interests

➔ The Home-Automobile Continuity market is at the intersection between 2 markets in real expansion.
Marketing interests

- The services offered has been identified through focus group and have a real economic interest

- Operator benefits
  1. Offer a new service => new revenues
  2. Develop intermediation services
  3. Develop Machine-To-Machine services
  4. Increase the number of mobile contract (1 contract per car ?)
  5. Keep in touch with customers by dynamically proposing them new services

- Customer benefits
  1. Access to the car from the home
  2. Access to the home from the car
  3. Save time
  4. Security
  5. Seamless personal services continuity
Partnerships
The CH@R project for car – home continuity

CH@R Partnerships

Service Provider

FT Wired network

FT Wireless network

Using Acunia Telematics solution

FT Home services

Who else wants to come on board?

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Who else wants to come on board?
Conclusion
Conclusion

➔ The CH@R project defines a link between Home and Car environments.

➔ The CH@R services represent a new type of offering towards the car driver.

➔ This will result in new business opportunities for the Telematics Service Provider (TSP) and the Telecom operators.

Thank you for your attention!