Medany Platform

An eRCP framework based on EMF

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Presentation

- **Anyware Technologies**
  - French Software Company based in Toulouse
  - Specialized in Eclipse Technology
  - http://www.anyware-tech.com

- **Olivier Prouvost**
  - Eclipse consultant and architect
  - Involved in Medany project
Initial Needs

- Acquiring data on mobile devices
  - texts, numerics, multimedia (pictures, sounds...)
  - external devices (glucometer, sensors...)

- Synchronizing these data on a server

- Notifying actors: SMS, Mail, ...

- Having applications to access to data (web...)

Initial Constraints

- **Data security**
  - access restrictions (Medical data, global data...)

- **Small bandwidth**

- **Simplicity**
  - usage: for nurses, doctors...
  - update: interfacing with other devices must be easy.
  - synchronization: automatic, two ways, disconnection
Medany Applications

- Local acquisition
- Synchronization
- Application update
- Update/Create data

Mobile devices | Server / Storage | Web client
Medany Scope

- Runtimes based on eclipse components
  - implement initial needs
    - PDA acquisition, synchronization, notification, eUpdate

- Tools to generate application(s) based on runtimes
  - model editors for application
  - projects, wizards, launch configurations
  - a set of generators based on model
Medany Tools principle

- Design initial needs in a meta model
  - define the roles, cards, fields, …

- Provide the model editor

- Define generation features
  - specific generators for a target technology
  - application template for the target application
  - some glue actions
Medany Studio Picture

- Medany Ecore Model
- EMF Medany Model Editors
  - Edit
  - Application Model
    - eRCP generator
    - Web generator
    - Synchro generator
    - Android generator
    - Tests generator

- OAW generators
- Appli templates
- glue actions

- Eclipse Platform
- Eclipse eRCP Platform

- Generated applications
openArchitectureWare

• used to generate applications

• strong concepts:
  ▸ Xpand template language
    - polymorphic language bound to model
  ▸ aspect programming

• lots of tools:
  - editors
  - debugger
oAW Principle.

Metamodel (1) → Generate a model Editor → Model (2) → Workflow (3) → generated files

bound to

aggregates

Xpand Templates (3)
Conclusion

• Eclipse/EMF/OAW the perfect association
  ▶ Easy to use
  ▶ Extensible
  ▶ Fully integrated
More Information

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