

Description of Catch'N Do

Philog has become heavily involved in a technological project, including an RF component (especially Bluetooth).

Within the context of this project, *Philog* has completed all stages of technical design, definition of equipments, creation of protocols, definition of software and patents registration.

Catch'N Do enable provides a bridge of simple communication, adoptable by any consumer, between the real world and the virtual world.

The innovation is to use a mobile phone or PDA as a terminal enabling to share information with different equipments, especially a terminal, through a service that is different from the telephony.

1. DESCRIPTION OF THE INITIAL PROJECT

The technical project technique consisted to place, in the mobile terminal, the elements enabling it to receive and/or deliver information from and / or to diffusion terminals.

To acheive these communications, *Philog* has developed a certain amount of programs to be embedded into the phone, the terminal, and, more generally, into equipments involved into these communications (servers, additional equipments...).

For this, *Philog* has identified vaious communication protocols between all these elements.

The communications, between the phone and the terminal, are RF-type (radio) and are, as a first step, Bluetooth oriented. **t** goes without saying that the set of protocol and software architectures are entirely independent from the transportation mode.

2. TECHNOLOGY

Philog procedeed with the implementation of a Terminal (PC) diffusing advertising-type messages to a mobile terminal (Visor-type PDA) via a BlueTooth connexion.

2.1 THE TERMINAL

Development of a Client application performing the following things:

• Permanent enumeration of the devices being in the picoNet.

For each device:

- Connexion RFCOM to the found server(s)
- Diffusion of messages using the PROMOBILE Philog format

Technical aspects:



- WidComm BlueTooth stack,
- IHM-type application under VisualC++,
- Multithread, API Socket, API CygWin,
- Portage under Linux.

2.2 PDA VISOR

Development of a Server Application:

- Waiting for a Client connexion (Terminal),
- Receiving messages,
- Messages user managment via a Man to Machine interface (filtering, redirection to an application of browser- or phone- type).

Technical aspects:

- WidComm Bluetooth stack,
- Cygnus (Gcc) cross compiler,
- .prc-type application taken into account by the HotSynch mecanism.