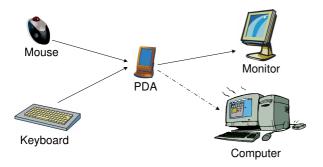
MAIPAN – Middleware for Application Interconnection in Personal Area Networks

Kristóf Fodor, Miklós Aurél Rónai, Gergely Biczók, Zoltán Turányi and András Valkó Ericsson Research, Hungary

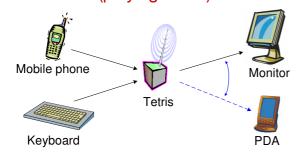
contact: Kristof.Fodor@ericsson.com

Goals

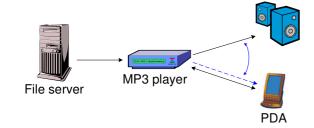
- provide a tool that supports the interconnection of Personal Area Network (PAN) applications and peripherals
- enable application designers to create applications for PANs in an easy way
- Scenario 1 (editing a presentation)



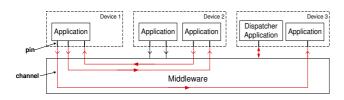
Scenario 2 (playing Tetris)



Scenario 3 (listening to music)

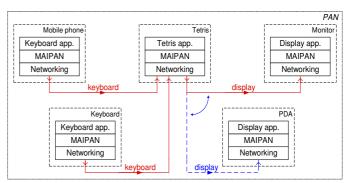


Basic concepts & definitions

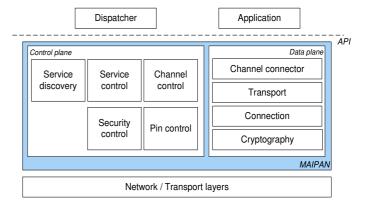


- pin: inlet or outlet of an application
- channel: interconnects two pins
- session: logical set of channels

Scenario 2 – from another view



MAIPAN architecture



- data plane: forwarding data through channels
- control plane: managing the connections

Functions provided

- interconnection of inputs and outputs of applications
- access control
- focus change
- encryption
- authentication of devices
- transport level guarantee