

AEOLUS OCP Wireless extensions

A demo application for interactive installations

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CTI

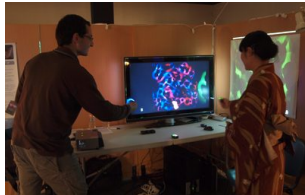
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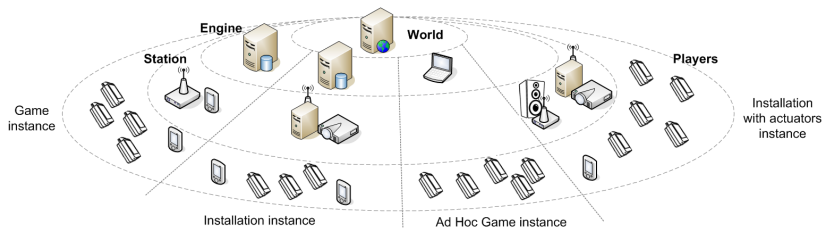


A demo application for interactive installations

- We wish to develop a platform for developing interactive installations.
 - Players interact by using movement and presence.
 - Other sensing inputs are also used as a means of performing game-related actions
 - Support the development of a wide variety of installations.
- A large variation of installations
 - 1 Chromatize It! – Coloring installation
 - 2 Tug of War – Action game
 - 3 Magnetize Words – Magnetic poetry installation
 - 4 Human Equalizer – Sound and motion installation







- *Player peers:* Sensors carried by players.
- *Station peers* (gateways): Control specific physical area.
- *Engine peers* (AEOLUS peers): Each controls one game instance.
- *World peer* (AEOLUS peer): Provide access to global game data via the Web.



AEOLUS OCP Services Used

- 1 Network statistics & management / control – monitors the condition of wireless networks.
- 2 Gateway for environmental monitoring & actuator control – gathers all the readings coming from the available sensor networks and forwards the queries and commands to the devices.
- 3 Buffering services – handles intermittent disconnections of wireless networks.
- 4 High-level network programming – allows adjustments to the operation of the wireless networks for the implementation of the game logic.



Related Publications

AEOLUS-4th-year-1 O. Akribopoulos, M. Logaras, N. Vasilakis, P. Kokkinos, G. Mylonas, I. Chatzigiannakis and P. Spirakis. Developing Multiplayer Pervasive Games and Networked Interactive Installations using Ad hoc Mobile Sensor Nets. In Proc. of the 5th International ACM/SIGCHI Conference on Advances in Computer Entertainment Technology (ACE 09), ACM, Vol. 422, pp. 174-181, 2009. **Golden Showcase Award.**

