The UbiCollab Vision

Collaboration covers a central role in our life since it is not just relegated to meeting rooms, but it comes with people on-the-way, both for work and leisure, during the whole lifetime. People need tools tailored for supporting their own cooperation process, as well as connects with third-party collaboration services. These tools are a valuable help for every person’s life, from children to elderly and thus need human-native interaction mechanisms.

UbiCollab (Ubiquitous Collaboration) vision is about supporting a natural, context-aware collaboration in a wide arena of scenarios, using mobile and ubiquitous computing technologies. UbiCollab provides a platform that captures the commonality of collaborative applications and provide tools for building end-user applications for specific scenarios. Integration with physical environment where collaboration happens is a key aspect of our platform. UbiCollab is open-source, everyone can contribute!

What's new?
- UbiCollab comes with a built-in Service Discovery module enabling a proactive user-interaction with generic devices over object tagging technologies.
- UbiCollab is extendible without extensive coding.
- UbiCollab is a generic, modular platform adaptable to dynamically support heterogeneous collaborative scenarios, e.g. improving collaboration in pervasive healthcare and elearning fields.
- UbiCollab is implemented based on the notion of human-grid.

The Human-Grid

The concept of a human grid constitutes our vision of ubiquitous collaboration. A human grid denotes a collection of (geographically distributed) users and the resources each of them has available in their physical vicinity. The core part of a human grid is the collaboration instance (CI), which CI represents the collaboration intention of the users, and works as a shared context for collaboration. For instance, a CI can represent an activity, a social world, a locale, a cognitive system, or a setting.

The UbiNode

Users interacts with the human grid through a UbiNode: a smartphone running an UbiCollab distribution, composed in independent platform modules, each of these implements a part of the UbiCollab functionality. A group of UbiNode user constitutes a UbiNetwork, an implementation of the human-grid.

UbiCollab supports modules dynamic deployments via Proactive Service Discovery, which means that additional modules providing new platform features and interaction with third-party devices, that can be easily installed by the users and on-the-move.