Communico: Overhearing Conversations in a Virtual Office

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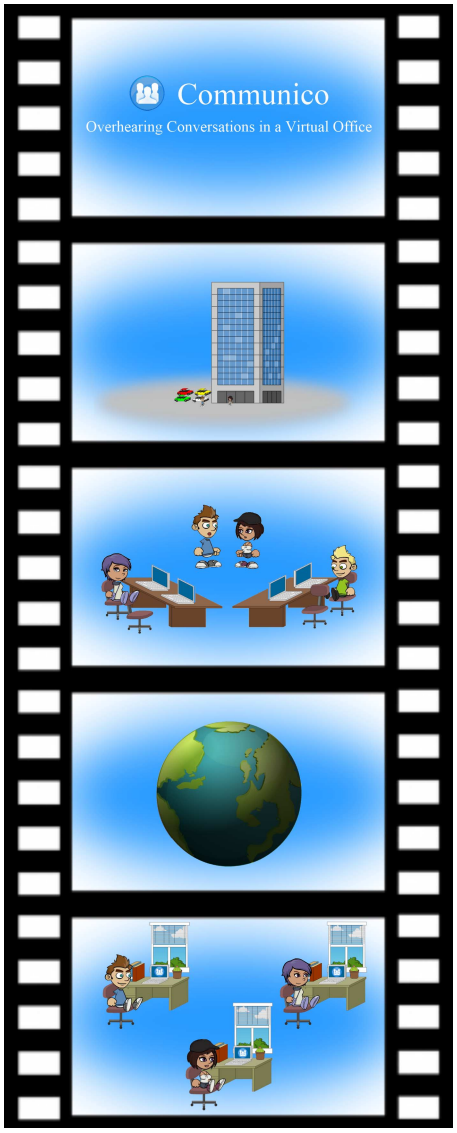
Abstract
This extended abstract accompanies our submission to the video track of the conference. We briefly introduce Communico, a tool which enables the overhearing of conversations in a distributed setting and describe how it fits the CSCW literature and audience.

Keywords
Communico, Conversations, Overhearing, GSE, Awareness, Collaborative Software Engineering

ACM Classification Keywords
H.4.3 Communications Applications, H.5.3 Group and Organization Interfaces

General Terms
Human factors, Theory

Communico
Conversations between colleagues in collaborative software engineering are important for coordinating work, sharing knowledge and creating knowledge. Overhearing conversations of others is useful as well since this: (i) provides access to the information discussed in the conversations, (ii) offers the possibility of joining the conversations and (iii) provides insight in the communication structure of the project team. When



working in a distributed setting, specialized tooling is required to be able to have conversations and to know what conversations others are having. This is the purpose of Communico (for more information see [1]): a virtual open conversation space which features: (i) initiating conversations by selecting people to converse with, (ii) sharing information regarding the involvement of project members in these conversations and (iii) having access to persistent conversations with an explicit status indicating whether they are ongoing.

Relation to CSCW

In collaborative work it is essential to have knowledge about the context in which you are working to properly cooperate with others [2, 3]. With information about the context we mean information about the other members in the project team, their activities, information about the state of the project and so on. This information is essential because this knowledge is necessary for coordinating actions, managing coupling, discussing tasks, anticipating others' actions, and finding help [2, 3, 4]. The complexity and interdependency of software systems (e.g., [5]) suggest that this is also the case for collaborative software development. In scientific literature the term *'awareness'* is often used to denote this [2, 6]. Dourish et al. use the following definition*: "An understanding of the activities of others which provides a context for your own activity"* [6].

When team members are not sharing a physical work environment they are outside of sensory range of each other. Therefore information exchange between them becomes infeasible without some kind of technological support. This can be dealt with by providing other ways of acquiring the required information, like using the telephone or email to ask a question. However, in general, such solutions are inferior to the way contextual information is shared in a traditional co-located setting because it takes more effort, is more obtrusive, happens less frequently and contains less information.

In the ASPIC research project [7, 8] we research the problems caused by the difficulties with acquiring and maintaining awareness in a distributed setting and how to support this with technology. Communico is one such technological solution, intended to be able to overhear conversations in a distributed setting just as this is possible in a traditional co-located setting.

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