

Supporting Informal Communication With Video Snapshots

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Introduction

Talking to the person next to you is easy, there's no need to arrange a meeting or wait for a returned phone call, you just talk, and when you're done you stop. The high degree of reciprocal aural and visual awareness between people in the same physical space enables them to appreciate both long term rhythms and current activity, and easily slip in and out of conversation. This informality is key for building relationships. Similar awareness could help enable informal communication between physically remote colleagues.

Prototype

We have constructed a prototype system to support informal communication between networked PC users.

System

Building on the open source instant messaging platform Jabber, the system operates on a reciprocal "if I can see you, you can see me" model. A client can only receive presence information from those it is prepared to trust with its own status.

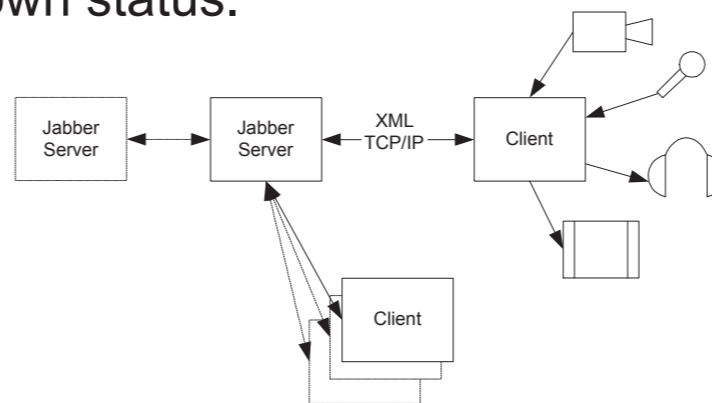


Figure 1 System Diagram

Our key unit of presence information is motion snapshots - every 10 seconds, one second of audio and video information is captured by the client and distributed to its buddies. This provides clear representation of current activity; the motion also allows perception of activity when displayed in the visual periphery.

Interface

To allow continuous unconscious perception of the activity of buddies, we have created a semi-transparent interface that floats over the top of the desktop.

In Figure 2 each rectangle represents a different buddy. Offline contacts are represented by static portraits, while online contacts are represented by the current video snapshot. This snapshot is looped until the next update arrives. The corresponding audio loops are played on mouse-over of the contact.

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nications.tex.draft-a...	39 KB	DRAFT-AS-EMAILE..
nications.tex.bak	39 KB	BAK File
nications.tex	39 KB	TEX File
nications.ps	861 KB	PostScrip
nications.pdf	103 KB	Adobe Acrobat Doc.
nications.log	8 KB	Text Document
nications.dvi	33 KB	DVI Document

Figure 2 Visual Interface